

Canadian Technical Report of  
Fisheries and Aquatic Sciences 2842

2009

**STATUS OF ANADROMOUS DOLLY VARDEN CHAR (*SALVELINUS MALMA*)  
OF THE RAT RIVER, NORTHWEST TERRITORIES, AS ASSESSED  
THROUGH MARK-RECAPTURE AND LIVE-SAMPLING AT THE  
SPAWNING AND OVERWINTERING SITE (1995-2007)**

by

S. Sandstrom<sup>1</sup>, L. Harwood, and K. Howland

Central and Arctic Region  
Fisheries and Oceans Canada  
Yellowknife, NT X1A 1E2  
Email: [lois.harwood@dfo-mpo.gc.ca](mailto:lois.harwood@dfo-mpo.gc.ca)

<sup>1</sup>RR#1, 108 Clarke Crescent, Port Sydney, Ontario, P0B 1L0

© Minister of Supply and Services Canada 2009.  
Cat. No. Fs 97-6/2842E ISSN 0706-6457

Correct citation for this publication is:

Sandstrom, S., Harwood, L., and Howland, K. 2009. Status of anadromous Dolly Varden char (*Salvelinus malma*) of the Rat River, Northwest Territories, as assessed through mark-recapture and live-sampling at the spawning and overwintering site (1995-2007). Can. Tech. Rep. Fish. Aquat. Sci. 2842: vi + 68 p.

## TABLE OF CONTENTS

|   |     |
|---|-----|
| List of Figures.....  | iii |
| List of Tables.....   | iv  |
| List of Appendices.....   | iv  |
| Abstract.....   | v   |
| Introduction.....   | 1   |
| Methods.....  | 2   |
| Capturing the Fish.....   | 3   |
| Sampling and Marking Fish.....  | 4   |
| Harvest Population Estimate (Fall to Summer).....                                 | 4   |
| Results and Discussion.....   | 5   |
| Abundance Estimation Using Ratio of Tagged to Untagged in the Summer Harvest..... | 5   |
| Trends in Length and Growth.....  | 6   |
| Life History Composition.....   | 7   |
| Incidence of Sequential Spawning.....   | 8   |
| Conclusions and Recommendations.....  | 9   |
| Acknowledgements.....   | 9   |
| Literature Cited.....   | 9   |

## LIST OF FIGURES

|   |    |
|---|----|
| Figure 1. Map of the Yukon North Slope showing the location of anadromous Dolly Varden char ( <i>Salvelinus malma</i> ) rivers in Canada.....                     | 11 |
| Figure 2. Satellite image of the western portion of the Mackenzie Delta.....  | 12 |
| Figure 3. Aerial photograph looking north up Fish Creek showing the location of the camp and various pools seined (yellow circles) to capture and tag char.....   | 13 |
| Figure 4. Exploded diagram of seine net used to collect Dolly Varden char from the pools at the spawning and overwintering site on Fish Creek, Rat River, NT..... | 14 |
| Figure 5. Picture of net.....   | 15 |
| Figure 6. Picture of field crew sweeping the seine net through a pool.....  | 16 |

|   |    |
|---|----|
| Figure 7. Picture of char being held by the seine net .....   | 16 |
| Figure 8. Fork length and number of char tagged by year at the spawning and overwintering site on Fish Creek, Rat River, NT. ....   | 17 |
| Figure 9. Plot of fork length at tagging vs fork length at recapture (one year later) for Dolly Varden char from the Rat River.....   | 18 |
| Figure 10. Plot of fork length at tagging vs fork length at recapture (one year later) of Dolly Varden char from the Rat River.....   | 19 |
| Figure 11. Regression of anadromous population size estimated by ratio of marked to unmarked in the summer harvest and the number of char tagged at the spawning and overwintering site the preceeding fall .....   | 20 |
| Figure 12. Mean fork length and 95% confidence interval of andromous female (top panel) and anadromous male (bottom panel) Dolly Varden char caught by seine net in each year of the survey at the headwater spawning and overwintering site on Fish Creek, Rat River, NT. .... | 21 |
| Figure 13. Plot of adult female Dolly Varden char fork length at tagging vs length at recapture one year later .....  | 22 |

### LIST OF TABLES

|  |    |
|--|----|
| Table 1. Life history composition of the seine catch (and fish tagged) at the spawning and overwintering site on Fish Creek, headwater tributary of the Rat River, NT. Results are presented by year of survey. Also present in separate tables are the ratio of spawning females to spawning males observed and total number of tags..... | 23 |
| Table 2. Population estimates by year along with the variables used to calculate. Estimates of abundances were calculated using the Chapman variation of the Peterson Equation.....  | 23 |

### LIST OF APPENDICES

|  |    |
|--|----|
| Appendix 1. Raw data collected by project..... | 24 |
|--|----|

## ABSTRACT

Sandstrom, S., L. Harwood, and K. Howland. 2009. Status of anadromous Dolly Varden char (*Salvelinus malma*) of the Rat River, Northwest Territories, as assessed through mark-recapture and live-sampling at the spawning and overwintering site (1995-2007). Can. Tech. Rep. Fish. Aquat. Sci. 2842: vi + 68 p.

The northern form of Dolly Varden char (*Salvelinus malma*) from the Rat River has provided an important seasonal food fishery for the Gwich'in and Inuvialuit of the Mackenzie Delta, NT for many generations. In order to protect and manage this resource, a harvester-led Fishing Plan was ratified in 1995. Key to the success of this Plan is the collection of periodic information on abundance and status of the Rat River stock. A science-based assessment program was initiated in 1995, during which time char were tagged at the headwater spawning and over-wintering site. The ratio of marked to unmarked fish recorded in the subsequent summer fisheries permitted estimation of the size of the migratory stock using the Chapman variation of the Peterson method. The number of 'available' tags to be captured the following summer was adjusted using an observed annual tag loss rate of 8%. The survey was repeated in 1997, 2001, 2004, and 2007 to examine temporal trends in population abundance. Results indicate the population has remained relatively stable in abundance ( $9,040 \pm 3,880$  fish;  $>320$  mm) over the 12-y duration of the study. However, the stock did experience a significant, but apparently temporary, decline which we detected in 2004. Observed increases in fork length of spawning fish, relatively stable sex and maturity composition and the recent observed pulse of juvenile production in 2007, were additional positive findings for this population.

Key Words: stock assessment, Dolly Varden char; mark-recapture; seining; abundance; over-wintering

## RÉSUMÉ

Sandstrom, S., L. Harwood, and K. Howland. 2009. Status of anadromous Dolly Varden char (*Salvelinus malma*) of the Rat River, Northwest Territories, as assessed through mark-recapture and live-sampling at the spawning and overwintering site (1995-2007). Can. Tech. Rep. Fish. Aquat. Sci. 2842: vi + 68 p.

La forme septentrionale de l'omble Dolly Varden (*Salvelinus malma*) de la rivière Rat fait, depuis de nombreuses générations, l'objet d'une importante pêche saisonnière à des fins alimentaires par les Gwich'ins et les Inuvialuits du delta du Mackenzie. Afin de protéger et de gérer cette ressource, les pêcheurs ont établi un plan de pêche, qui a été ratifié en 1995. La clé du succès de ce plan est la collecte périodique d'information sur l'abondance et l'état du stock de la rivière Rat. Un programme d'évaluation scientifique a été initié en 1995. Au cours de ce programme, on a procédé à l'étiquetage des ombles dans la zone de frai et d'hivernage en amont. Le rapport entre le nombre d'ombles marqués et non marqués enregistré au cours des pêches estivales suivantes a permis d'estimer la taille du

stock migrateur en utilisant la variation Chapman des formules de Petersen. Le nombre d'étiquettes pouvant être récupérées au cours de l'été suivant était corrigé en fonction d'un taux annuel observé de perte d'étiquettes de 8 %. Le relevé a été répété en 1997, en 2004 et en 2007 dans le but d'étudier les tendances temporelles de l'abondance de la population. Les résultats indiquent que l'abondance est demeurée relativement stable ( $9,040 \pm 3,880$  poissons; > 320 mm) au cours de la période de 12 ans sur laquelle l'étude s'est échelonnée. Toutefois, nous avons décelé un déclin marqué, mais apparemment temporaire de la population en 2004. Parmi les autres constatations encourageantes qui ont été faites sur ce stock, mentionnons des augmentations de la longueur à la fourche chez les sujets reproducteurs, la stabilité relative de la composition selon le sexe et le niveau de maturité, et une augmentation récente de la production de juvéniles observée en 2007.

Mots clés: évaluation des stocks; omble Dolly Varden; marquage-recapture; seinage; abondance; hivernage

## INTRODUCTION

The Yukon North Slope and adjacent portions of the Northwest Territories have six known river systems that support genetically discrete stocks of the northern anadromous form of Dolly Varden (*Salvelinus malma*)(Walbaum) (Reist 1989; Reist et al. 1997). These rivers, in order from west to east, are Joe Creek, Firth, Babbage, Big Fish, Rat and Vittrekwa (Figure 1).

The Rat River is 130 km in length and originates in the Richardson Mountains flowing east into the Husky Channel of the Mackenzie River Delta, approximately 100 km SW of the town of Inuvik, NT (Figure 1). The anadromous Dolly Varden stock in this river spawn and over-winter in regions of Fish Creek, a headwater tributary (Figure 2) where perennial springs maintain a stretch of open water year round. This area, referred to locally as the 'Fish Hole', is the only known spawning and overwintering area.

Dolly Varden char leave the river in the spring (May-June), migrating downstream along the channels of the Mackenzie Delta to the Beaufort coast. Once at the marine environment, little is known about the nature and range of their movement, but presumably they move west along the Yukon coast feeding in the highly productive near-shore zone. Their migration may take them up to and beyond the Alaskan border, but this is purely speculation. Of the almost 2000 tags put on Dolly Varden char during this program, none have been documented in any of the subsistence fisheries along the Alaskan portion of the North Slope.

Dolly Varden char begin their return migration from the coast to the 'Fish Hole' in late July, early August. As they begin to make their way up the channels along the western side of the Delta, they encounter the subsistence fisheries in and around the communities of Aklavik to the north and Fort McPherson to the south. A highly-desired seasonal food item, fishers set nets on the surface in back eddies at traditional locations along approximately 130 km of channels which include sections of West Channel, Husky Channel and lower portion of the Rat River up to an impassable set of rapids in an area known locally as Destruction City. Fish are typically dried and/or smoked on site before being brought back to the communities for distribution. Traditional knowledge has indicated that this fishery has operated pretty much as it currently does for well over 100 years. However, common opinion of elders is many more Dolly Varden char were consistently harvested in the past (i.e., 1960s-70s) than are currently (1990 onwards) (J. Charlie Sr, pers. comm.). As recently as the 1970s, regular trips were made to the Fish Hole by dog team in the winter to harvest large numbers of fish from the overwintering pools, in addition to those taken in the summer fishery in the lower river. These would be placed in underground caches and used over the winter as people hunted and trapped in the area. This practice no longer occurs, and the Fish Hole is now protected from harvest under the guidelines of the Rat River Fishing Plan developed in 1995. Resource users and managers began to suspect the population may be experiencing problems in the early 1980s due to declining catch rates, sparking a number of projects aimed at estimating population size and evaluating if harvest levels were sustainable.

The first attempt was in 1983, involving a fixed conduit weir installed just upstream of Destruction City (Figure 2). The objective of this project was to enumerate all migrant Dolly Varden char returning from the sea (Gillman and Sparling 1985). The weir was operational from August 8-30, during which time a total of 1,312 Dolly Varden char were counted. Unfortunately, high water levels forced the removal of the weir while the run was still in progress and a complete count was not obtained.

In 1989, realizing that a total count was not possible given the unpredictable flow regime in this system, a two-phase mark-recapture estimate was conducted. Tags were applied in August to 972 Dolly Varden char captured using hoop-nets set at Destruction City (Stephenson and Lemieux 1990). Later, in late-September, a separate survey of tagged to untagged fish was undertaken at the Fish Hole using electro-shocking. This project produced the first estimate, prior to those reported herein, of the sea-run (>300 mm) population size; estimate was 11,191 (8,532-15,020) Dolly Varden char.

In 1995, the harvester-led Rat River Fishing Plan was ratified which set out recommendations for how the fishery would be conducted to ensure protection and viability of the stock. The paramount recommendation was to ensure the fishery was biologically sustainable, which would require regular estimates of standing stock size and a strictly adhered to a recommended harvest level. A two-part program was developed and implemented in 1995 to support the information needs of the Fishing Plan. This included a harvest monitoring program which operated every year and a science-based assessment program conducted on a three-year interval. Results of the annual harvest monitoring program are presented in a separate report (Harwood et al. 2009). The following discusses results from the assessment program which had the specific objective of:

- estimating stock size through a mark and recapture study,
- assessing life history composition of Dolly Varden char at the spawning and overwintering area,
- providing samples for other research needs (e.g., genetic analyses),
- incorporating local knowledge of the Gwich'in in the delivery of the project.

The following report outlines the methods used and the trends observed in estimated anadromous stock size, life-history composition, growth, and incidence of repeat spawning between 1995 and 2007.

## METHODS

The study was conducted in late September and/or early October in 1995, 1997, 2001, 2004, and 2007 on Fish Creek, a headwater tributary of the Rat River and the only known spawning and over-wintering site (Figure 2). A field camp was established upstream of the large distinctive gravel plain where the Aufeis (layered ice) field forms in the winter (Figure 3). Crew and gear were flown into the site by helicopter with the tagging typically requiring three days to complete.

The river in this area is comprised of series of alternating pools and riffles (shallow rapids), sections of varying depth, width and length. There are approximately 20 pools suitable for



seining above and within the Aufeis field (Figure 3). Pools did not exceed 2.5 m in depth, with most averaging a maximum depth of 1.0 m to 1.5 m. The width of pools seined varied from 4.5 m to 25 m.

## **CAPTURING THE FISH**

A specially modified seine net was used to sample the pools (Figures 4 and 5). This was 16 m long and featured a heavier end (triple lead line) with additional floatation and a light end (double lead line). Typically, the pools at this site were comprised of a shallow side and a deeper side. The heavier end was usually assigned to the deeper side of the pool where water velocity was higher and the additional weight and floatation helped to keep the lead line on the bottom and the float line at the surface. This design was later modified in the third year of the program (2001) by the addition of a second length of seine material sewn along the length of the net. One edge was sewn along the lead line and the other approximately half way up the side of the original seine net. This created what was essentially a long bag at the bottom of the net. The original seine net which formed the front (face) had a number of vertical holes cut in it that allowed fish to pass through, becoming trapped between the two sheets of seine material. This greatly reduced the number of fish that would escape under the lead line as the net was brought into shallower water. It also functioned as a holding pen while the catch was being processed.

Seine hauls were directed at the pools where substantial numbers of fish could be seen congregating. These were required to be relatively free of large rocks and woody snags, particularly at the downstream margin where the net would be brought around the fish. It was impractical to seine the riffle areas due to their shallow depth and high velocity of flow, and hence, not surveyed in this program. However, it was apparent that Dolly Varden char only use these stretches intermittently and would often, if present in this habitat, move into the deeper, adjoining pools as the sampling crew approached where they would become vulnerable to the sampling gear. The standard approach to seining a pool was to lower the net into the pool at its most upstream limit and slowly sweep through the pool on an angle in a downstream direction pulled by a crew member at each end (Figure 6). An additional person would walk behind the net to help free the lead line if it happened to catch on a rock or branch, this also helped to deter fish from prematurely charging upstream before it was time to close off the seine. A fourth person was positioned in the riffle area below the pool during the seine haul so that the fish were between him/her and the net. This person also would assist with the initial movement of the seine through the upper reaches of the pool before moving into position downstream. Rocks were thrown into the deeper upstream portions of the pool as the seine was being positioned to move fish downstream where they could be better corralled. As the seine moved down and out of the pool and approached the adjoining downstream riffle area, the crew member downstream would begin splashing and moving upstream herding the fish towards the net. At this point, the downstream end of the net would be quickly swung across the river trapping the fish. Once both ends of the net were on the same shore and the fish were corralled, the lead line was slowly brought in bagging the fish between the float line and the lead line (Figure 7). The net and fish were then moved to an area of the pool where water depth was sufficient to allow all captured fish to remain upright in the net. If possible, Dolly Varden char previously tagged that year

and all arctic grayling (*Thymallus arcticus*) were removed first to minimize unnecessary crowding. No injury or mortality associated with the seining or tagging procedure was observed during any of the sampling projects.

## SAMPLING AND MARKING FISH

Dolly Varden char that were of a suitable size for tagging (>300 mm) were measured for fork length, identified as to sex and life history stage (spawner vs silver [non-spawner]) and tagged using a uniquely numbered Floy T-tag. Floy tags used during this program varied in colour – white (1995 and 2004), orange (1997), pink (2001), and green (2007). Importantly, tags used in one year were not reused in any other year, reducing the chance that the year of tagging could be mistakenly assigned. Tags were inserted with a Dennison tagging gun between the basal pterygiophores below the posterior portion of the dorsal fin. Tags and the needle of the tagging gun were sterilized in antiseptic solution (e.g., biodine) between each fish to prevent the spread of disease and bacteria. Fish were immediately released back into the river upon tagging and were not held for any subsequent amount of time. Arctic grayling were enumerated in some years but more often simply released with no biological sampling. Summary of the number of char tagged by year are provided in Table 1 and the length distribution depicted in Figure 8.

## HARVEST POPULATION ESTIMATE (FALL TO SUMMER)

From 1995 to the present, a harvest monitoring study has been underway at a number of locations (n=3-5, depending on year) along the migratory route of this stock (Harwood et al. 2009). Two of these operated within the Rat River proper (near the mouth) and the others in a number of locations along the adjoining channels in the Mackenzie Delta (Figure 2). The monitoring program provided the recapture event (a year after tagging) permitting the estimate of population size by comparing the ratio of marked to unmarked fish in the harvest. In addition, the fishery provided key biological information not possible from the marking program, such as the age structure, evaluation of annual growth rates, and determination of the incidence of sequential spawning (consecutive years).

Estimates of population size were determined using the Chapman variation of the Peterson Equation (Ricker 1975):

$$N = \frac{(M+1)(C+1)}{(R+1)}$$

$$\text{var}(N) = \frac{(M+1)(C+1)(M-R)(C-R)}{(R+1)(R+1)(R+2)}$$

$$\text{Standard error} = \sqrt{\text{var}(N)}$$

95% confidence limits of N = N ± t(standard error)

where:

N = Estimate of total population size,

M = Total number of fish tagged (time 1),

C = Total number of fish caught (time 2) of a size that would have been tagged

R = Total number of recaptures.

For each estimate, the number examined in the harvest was adjusted to account for fish that would not have been vulnerable to tagging the previous fall. This was calculated using the regression equation of fork length at marking vs fork length at recapture. Comparison of this relationship from the earlier time period of 1995+97 and the later time period of 2001+04 were not significantly different (Ancova;  $p=0.882$ ; Figure 9) permitting all samples prior to 2007 to be combined (Figure 9). In 2007, the observed annual growth was found to be significantly higher (Ancova;  $p<0.0001$ ) than that observed in the earlier time periods (Figure 10). Hence, for the analysis of the 2007 abundance the minimum size examined (i.e., summer of 2008) was adjusted using the specific regression equation for this year. The minimum size included in the examined pool (i.e., time 2 sample) was calculated using the following equations:

$$\text{Min size examined (years: 1995-2004)} = 0.7658 (\text{min size tagged}) + 155$$

$$\text{Min size examined (years: 2007)} = 0.7498 (\text{min size tagged}) + 203$$

Only fish larger than this were included in the total number of fish examined.

In both 1995 and 2004, the size distribution of the recaptures adequately represented the range of size tagged, allowing for calculation of abundance to the minimum size tagged (~320 mm). However, for the 1997 and 1998 estimate, the minimum size tagged was adjusted, using the 1995-2004 growth relationship to match the minimum size recaptured. In these two years, no tagged fish were captured below 440 mm which precluded calculation to the actual minimum size tagged. In 2007, recaptures adequately spanned the size range tagged and a similar adjustment was not necessary.

Incidence of tag loss was determined by clipping the adipose fin of all Dolly Varden char floy tagged in 2007 ( $n=431$ ). The survey was then repeated at the overwintering site the following fall and the proportion of adipose clipped Dolly Varden char observed without a tag to the total number of 2007 tags recaptured was determined. Only one of the 13 adipose clipped Dolly Varden char observed in 2008 ( $n=381$  Dolly Varden char examined) did not have an accompanying tag, providing an estimate of 8% annual tag loss.

## RESULTS AND DISCUSSION

### ABUNDANCE ESTIMATION USING RATIO OF TAGGED TO UNTAGGED IN THE SUMMER HARVEST

Table 2 provides a summary of the parameters used to calculate the estimated population size for the five tagging periods. This is based on (1) the number of fish captured by the

monitors of a size that would have been tagged the previous fall, (2) the number of tags estimated to still be at large at time of harvest (adjusted for tag loss), and (3) the actual number of tags observed in the harvest. The abundance estimates indicate that throughout the time series, the anadromous population (>320 mm) was observed to have remained relatively stable with a mean of approximately 9,000 fish ( $\pm$  4,000). The population experienced a significant drop in abundance ( $p=0.0342$ ) to around 3,000 sea-run fish in and around 2004, but this was only temporary as the 2007 estimate was observed to be the highest (approximately 15,000 fish) for the time series. The decline in abundance in 2004 was also evident in the availability of fish at the spawning and overwintering site, with the lowest number of fish caught and tagged that year (Figure 11). The precision of the 2007 estimate was considerably lower than in previous years due to the small number of fish examined in recapture event, a consequence of the fishery being closed and the monitor's sampling being constrained. Although not formally included in this report, due to difference in methodology utilized, a population estimate conducted in the fall of 2008 using seine nets as the recapture event similarly found the abundance of the sea-run component to be up significantly (near the level of the long-term mean) from the low determined in 2004 (DFO, unpublished data). Estimates over the time frame of this program (1995-2007) were comparable to that documented for the population in the late-1980s (Stephenson and Lemieux 1990).

## TRENDS IN LENGTH AND GROWTH

The length distribution of the fish tagged each year of the program visually show a great deal of similarity, the exception being the most recent survey (2007) in which juvenile silvers (i.e., <400 mm) made up a large proportion of the total catch (Figure 8). In no other survey (i.e., year) has this life history stage been so predominant. These fish, judging by their body size, would likely be four-year-old post-smolts (two summers feeding at sea), and if so, would have been the progeny of the 2002 spawning population. It remains unclear whether this increase in production occurred during the freshwater stages (2002-2005), or in 2006 and 2007 at the smolt (first time to sea) and/or post-smolt stage (second time to sea). However, this can be interpreted as another positive observation for the population.

Mean length for male and female spawning Dolly Varden char were found to be significantly smaller for both sexes in both 1995 and 1997 than any time during the period of 2001-2007 (Anova;  $p=0.0001$  female;  $p<0.032$  male) (Figure 12). Average length of spawning males pre-2000 was 476 mm ( $\pm$  58 mm,  $n=72$ ) vs 552 mm ( $\pm$  65 mm,  $n=26$ ) post-2000. Average length of spawning females pre-2000 was 466 mm ( $\pm$  42 mm,  $n=460$ ) vs 489 mm ( $\pm$  48 mm,  $n=139$ ) post-2000. Within time periods, mean fork length was not observed to increase for either sex ( $p=0.9102$ , 1995-97 female;  $p=0.1922$ , 1995-97 male;  $p=>0.2433$ , 2001-07 female;  $p=>0.1828$ , 2001-07 male). Age structure data from the harvest supports this observation and clearly demonstrate the increase is not due to a shift in the age structure (i.e., more older larger fish), but the result of Dolly Varden char being significantly larger at a given age (Harwood et al. 2009). Comparison of mean length of silvers live sampled over the time series would be misleading without age data as it is highly biased by magnitude of annual recruitment, thus, is not presented.

For sample years where sufficient numbers of tagged adult fish were caught to conduct the analysis (i.e.,  $n > 10$ ; 1996 and 2006), the regression plot of sequentially spawning female fork length at tagging vs length at recapture, after one summer at sea, also demonstrate that growth rates are significantly higher in the more current sample (Ancova;  $p = 0.0288$ ) (Figure 13). The trend of increasing growth over time is additionally supported by significantly higher (Ancova;  $p < 0.0001$ ) growth observed in the recaptured sample from the most recent 2007 survey, which was the highest annual growth rate recorded in this program (Figure 10).

In 2007, population abundance (hence, spawning and overwintering density) was also estimated to be the highest in the time series (Table 2). However, this is bounded by wide confidence limits (i.e., uncertainty) due to the low number of fish examined in the recapture event. Concurrency of the two observations (i.e., growth and abundance) do not support the hypothesis that increased growth rates over the time period are related to density-dependent effects elicited by declines in population abundance (a possible consequence of historic harvest pressure). Furthermore, evidence from historic in-river programs on North Slope systems overwhelmingly suggests freshwater feeding of anadromous Dolly Varden char is likely only incidental (Sandstrom 1995). Hence, access and availability of food resources in the coastal environment likely do not operate under any density dependence given the assumed magnitude of the marine food resource and assumed solitary foraging behaviour of the species. The linearity of the relationship of length at tagging vs length at recapture (Figure 9) supports this assertion. Presumably, if it were not the case, growth should be higher for larger, more dominant individuals and this relationship curvilinear in appearance.

Harwood et al. (2009) observed a relationship between the somatic condition factor (measure of fish robustness) and coastal break-up date as measured circuitously by Beaufort Shelf ice clearing date. In years when the Shelf was completely free of ice earlier than average, fish were observed in the upstream harvest generally at a higher somatic condition (i.e., more grams per centimetre body length). This finding supports the contention that significant increase in observed mean body size between pre- and post-century surveys, and that observed for the 2008-09 growing season, may be due to a temporally increasing period/season of food acquisition afforded by earlier access in the spring. Speculation of an increasing trend in break-up date, and hence, downstream migration, is supported by observed weather patterns recorded for the Delta and forecasted by latest climate models (Bonsal et al. 2007). These show that the transitional seasons of spring and fall have, and likely will continue to be, prolonged as a result of climate warming.

## **LIFE HISTORY COMPOSITION**

The composition of the population tagged at the spawning and overwintering site for each year of the project is summarized in Table 1. The proportion of female to male spawners has remained relatively consistent over the time series with females accounting for 80-98% of the annual spawning population. These findings are consistent with the sex ratios observed in the harvest (Harwood et al. 2009). This highly skewed sex ratio is not unique

to this system and is exhibited by one other North Slope population in the Big Fish River (Sandstrom et al. 2002). However, what makes the Rat River situation somewhat unique is the apparent absence of resident males at the spawning and overwintering site. Resident, or precocious males as they are sometimes referred to in the literature, are fish which mature entirely in freshwater without ever going to sea to feed. They are typically much smaller than the anadromous males and participate by sneak spawning with the anadromous pair. Over the five tagging projects only one resident male Dolly Varden char has ever been caught (in 2004). In contrast, they have been observed to be more abundant in similar fall seining projects at the Big Fish River (Sandstrom et al. 2002). The reason for the apparent low abundance of males (both anadromous and resident) is perplexing and unfortunate as it represents a significant loss of harvestable biomass, perhaps as much as 45% of annual production. If males in this system do, in fact, exhibit high propensity for early precocious maturation but also suffer high natural mortality in doing so (explaining their absence), then they also would not be contributing to the spawning biomass. It is very questionable whether there are a sufficient number of anadromous males to successfully mate with all available females (9.5:1 ratio). The potential absence of any supplementary precocious male contribution coupled with lack of anadromous partners may result in a large proportion of the females spawning either unsuccessfully, or not at all. Mature females handled during the tagging program were almost exclusively spent, so it does not appear that unsuccessful fish (assuming some would be detected in survey) have the ability to maintain or reabsorb eggs. More detailed habitat and behavioural studies are necessary to shed light on the impact the observed sex ratio is having on the annual reproductive capacity of this population.

## **INCIDENCE OF SEQUENTIAL SPAWNING**

To investigate the incidence of sequential (repeat) spawning in this stock, tag recaptures across all years were combined, primarily to provide sufficient sample size of male spawners. A total of 106 Dolly Varden char, identified as spawners the previous fall, were captured the summer after tagging (male  $n=6$ ; female  $n=100$ ). Of these, 17% of the male Dolly Varden char ( $n=1$ ) and 56% ( $n=56$ ) of the female Dolly Varden char were recaptured as sequential spawners. This data suggests that reproductive costs associated with male maturation may be substantially higher than that required for females, hence requiring more summers of feeding to replenish the energy deficit associated with gonad maturation. Another possible reason may be explained by life history theory which suggest the larger the body size the greater the reproductive fitness for males of a species, such as Dolly Varden char, that require defending a partner from other rival males (Roff 1992). Dolly Varden males may be opting, once they have spawned, to skip years to utilize surplus energy for somatic growth to maximize future reproductive efforts. Unfortunately, tag recapture sample sizes for males are insufficient to allow for investigation of somatic growth differences between the two strategies. However, given the extraordinarily high sex ratio (9:1 female to male) documented for this population, it is unclear why this strategy would be selected for as competition among males for access to gravid females must be minimal.

Comparison of the incidence of sequential spawning for female Dolly Varden char over the complete time period of this program is difficult due to small sample of recaptures in 1998

and 2002. However, the data for 1996 and 2005 is sufficient and indicates that the incidence of repeat spawning is approximate 60% for females at either end of the time series (1996, 28 out of 49 = 57%; 2005, 14 out of 24 = 58%).

## CONCLUSIONS AND RECOMMENDATIONS

The Rat River population has remained relatively stable in abundance (approximately 9,000  $\pm$  4,000; >320 mm) over the time period of this program (1995-2007). However, the population did experience a significant, but temporary, decline which we detected in 2004. Abundance determined during this program was comparable to that calculated for the anadromous population in 1989.

Significant increases in the fork length of spawning fish over the time series, relatively stable sex and maturity composition, and the recent observed pulse of juvenile production are all encouraging signs. With this said, the highly skewed sex ratio observed does present a point of concern with male abundance at precariously low levels. It is not likely a problem that can be corrected through management practice, but as a source of mitigation it would be advised that fishers release any live fish they feel could be an anadromous male.

The approach taken in estimating population size in this program represents an efficient and relatively harmless method of putting tags on large numbers of Dolly Varden char from this stock. These tags provide important data on movements, growth, maturation cycles, population size, and exploitation rates of the subsistence harvest.

## ACKNOWLEDGEMENTS

The work and dedication of the field crews, fishermen, and biologists over the years of study reported here are gratefully acknowledged. We acknowledge the field efforts of the Ben Mitchell, Ryan McLeod, Dale Semple, Stephen Tetliche, Patrice Simone, Nathan Millar, Leslie Snowshoe, Joe Illasiak, Woody Elias, and the late Johnny Charlie. We also thank Canadian Helicopters for safe flights over the years. The Gwich'in Renewable Resources Board (GRRB), the Polar Continental Shelf Project (PCSP), and the Fisheries and Oceans Canada (DFO) provided funding to conduct this work.

## LITERATURE CITED

- Bonsal, B., Kochtubajda, B., and Stene, T. 2007. Climate change scenarios over the Mackenzie Delta and near-shore Beaufort Sea region. Appendix VII: Beaufort Sea strategic regional plan of action. pp. 466-507.
- Gillman, D.V., and Sparling, P.D. 1985. Biological data on Arctic char, *Salvelinus alpinus* (L.) from the Rat River, Northwest Territories, 1983. Can. Data Rep. Fish. Aquat. Sci. 535: iv + 15 p.

- Harwood, L.A., Sandstrom, S., and Linn, E. 2009. Status of anadromous Dolly Varden (*Salvelinus malma*) of the Rat River, Northwest Territories, as assessed through sampling of the subsistence fishery (1995-2007). Can. Tech. Rep. Fish. Aquat. Sci. 2891: vii + 52 p.
- Reist, J.D. 1989. Genetic structuring of allopatric populations and sympatric life history types of char, *Salvelinus alpinus/malma*, in the western Arctic, Canada. In Biology of chars and masu salmon: proceedings of the International Symposium on Chars and Masu Salmon, Edited by H. Kawanabe, F. Yamazaki, and D.L.G. Noakes. Physiol. Ecol. Japan, Spec. Vol. 1:405-420.
- Reist, J.D., Johnson, J.D., and Carmichael, T.J. 1997. Variation and specific identity of char from northwestern Arctic Canada and Alaska. Amer. Fish. Soc. Symp. 19:250-261.
- Ricker, W.E. 1975. Computations and interpretation of biological statistics of fish populations. Fish. Res. Board Can. Bull. 191. 382 p.
- Roff, D.A. 1992. The evolution of life histories, theory and analysis. Chapman and Hill. 535 p.
- Sandstrom, S.J. 1995. The effect of overwintering site temperature on energy allocation and life history characteristics of anadromous female (*Salvelinus malma*), from northwestern Canada. M.Sc. Thesis, University of Manitoba, Winnipeg, MB. 161 p.
- Sandstrom, S.J., and Harwood, L.A. 2002. Studies of anadromous Dolly Varden (*Salvelinus malma*) (W.), of the Big Fish River, NT, Canada 1972-1994. Can. Manuscr. Rep. Fish. Aquat. Sci. 2603: vi + 34 p.
- Stephenson, T., and Lemieux, P.J. 1990. Status of the Rat River char population, 1989. Fisheries Joint Management Committee (FJMC) Report No. 89-008. 62 p. Available: FJMC, Box 2120, Inuvik, NT, Canada. Prepared by Department of Fisheries and Oceans, Box 1871, Inuvik, NT Canada.



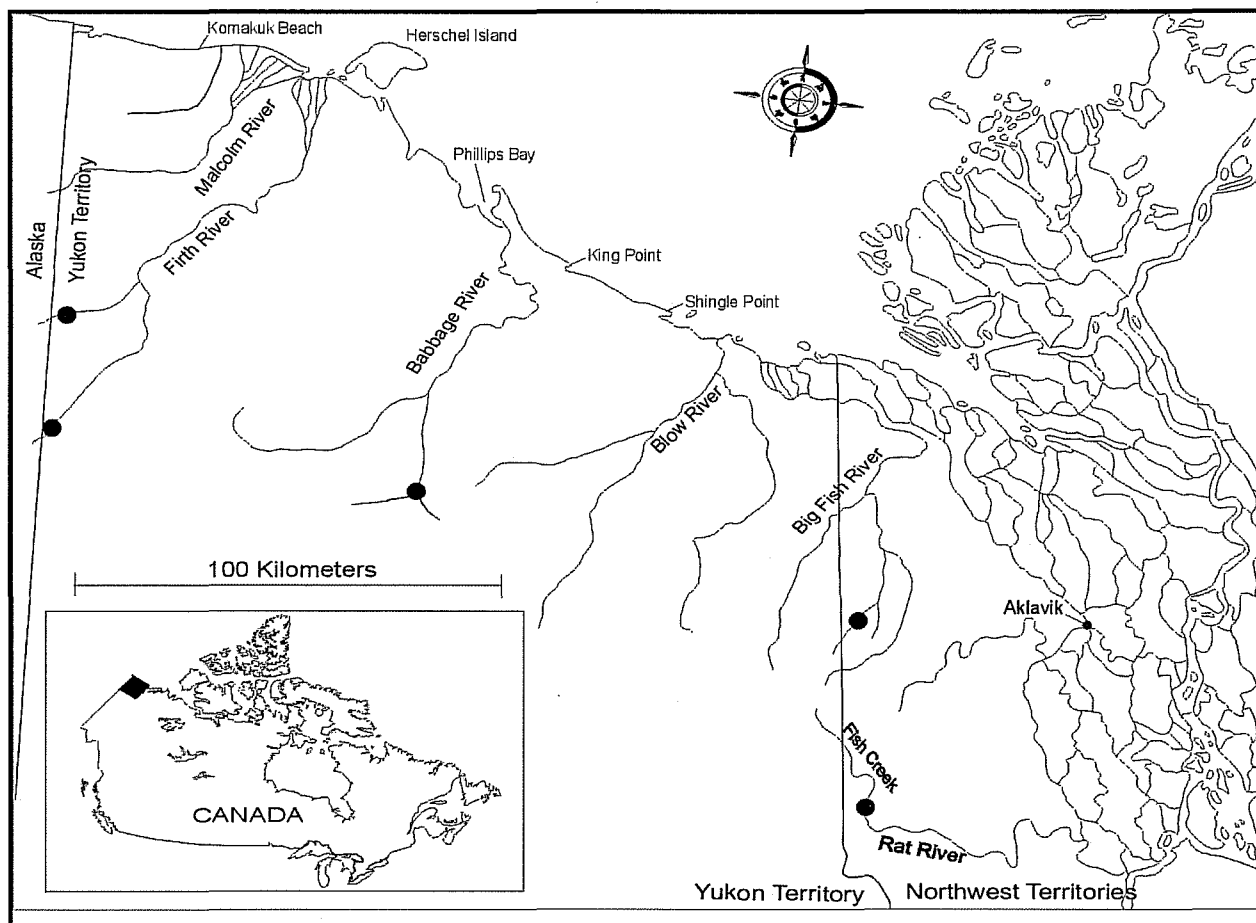


Figure 1. Map of the Yukon North Slope showing the location of anadromous Dolly Varden char (*Salvelinus malma*) rivers in Canada. The dots denote known spawning and overwintering sites for Dolly Varden char. Missing from this map is the location of the Vittekwa River which lies approximately 80 km directly south of the Rat River.

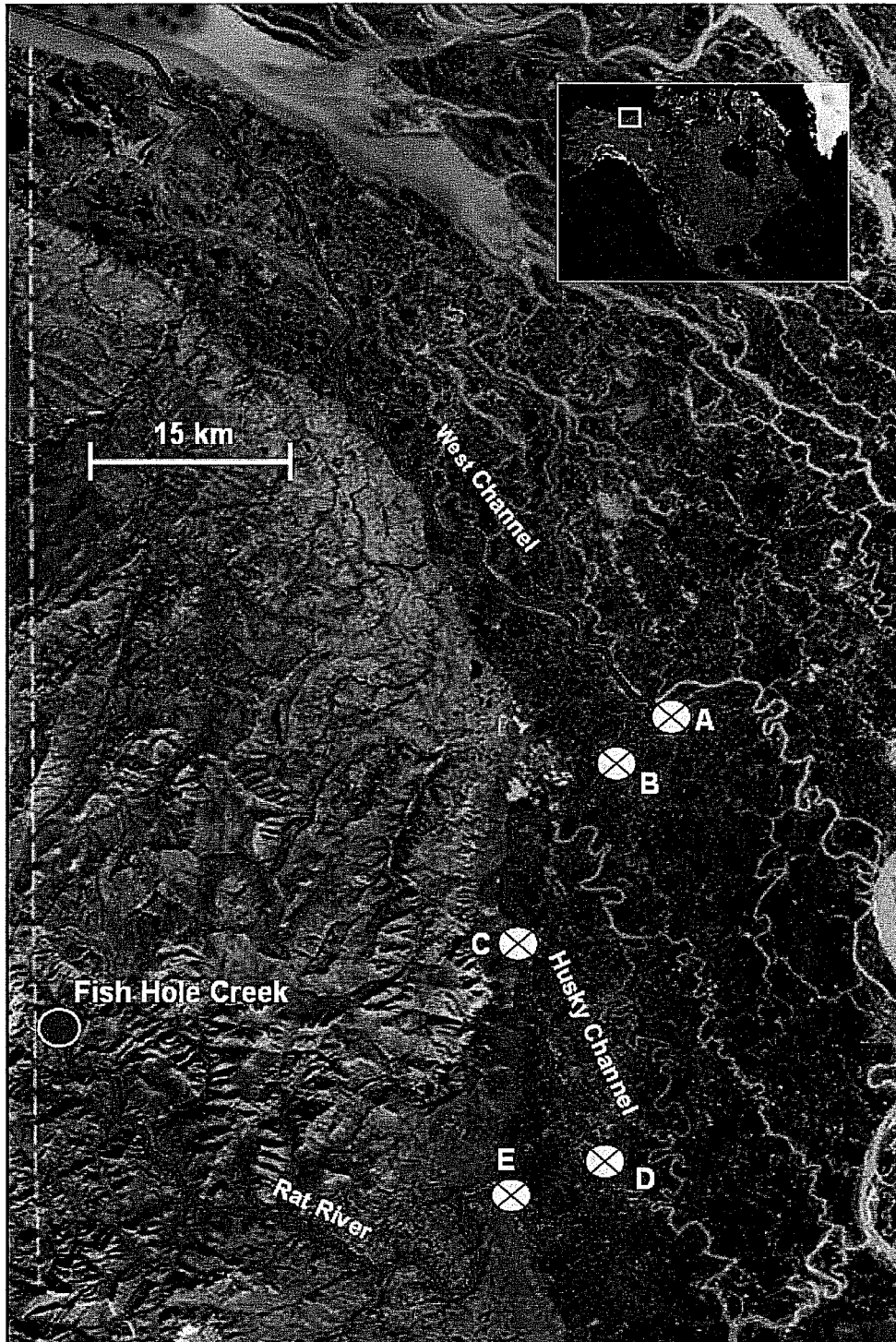


Figure 2. Satellite image of the western portion of the Mackenzie Delta. Blue line indicates the primary migration corridor of the Rat River Dolly Varden (*Salvelinus malma*) stock. Yellow dots denote the location of the fishery monitors from which the ratio of tagged to untagged fish was obtained (A=Aklavik; B=Husky Channel; C=Big Eddy; D=Rat River; E=Destruction City).



Figure 3. Aerial photograph looking north up Fish Creek showing the location of the camp and various pools seined (yellow circles) to capture and tag char. The large gravel plain is where ice accumulates during the winter as water from perennial springs to the north flow downstream, cooling as it goes and eventually freezing forming an Aufeis (layer ice) field. Pools upstream of the gravel field displayed above are the only known spawning and overwintering habitat of the Rat River Dolly Varden char population. Distance from camp to the last pool indicated above is approximately four kilometres.

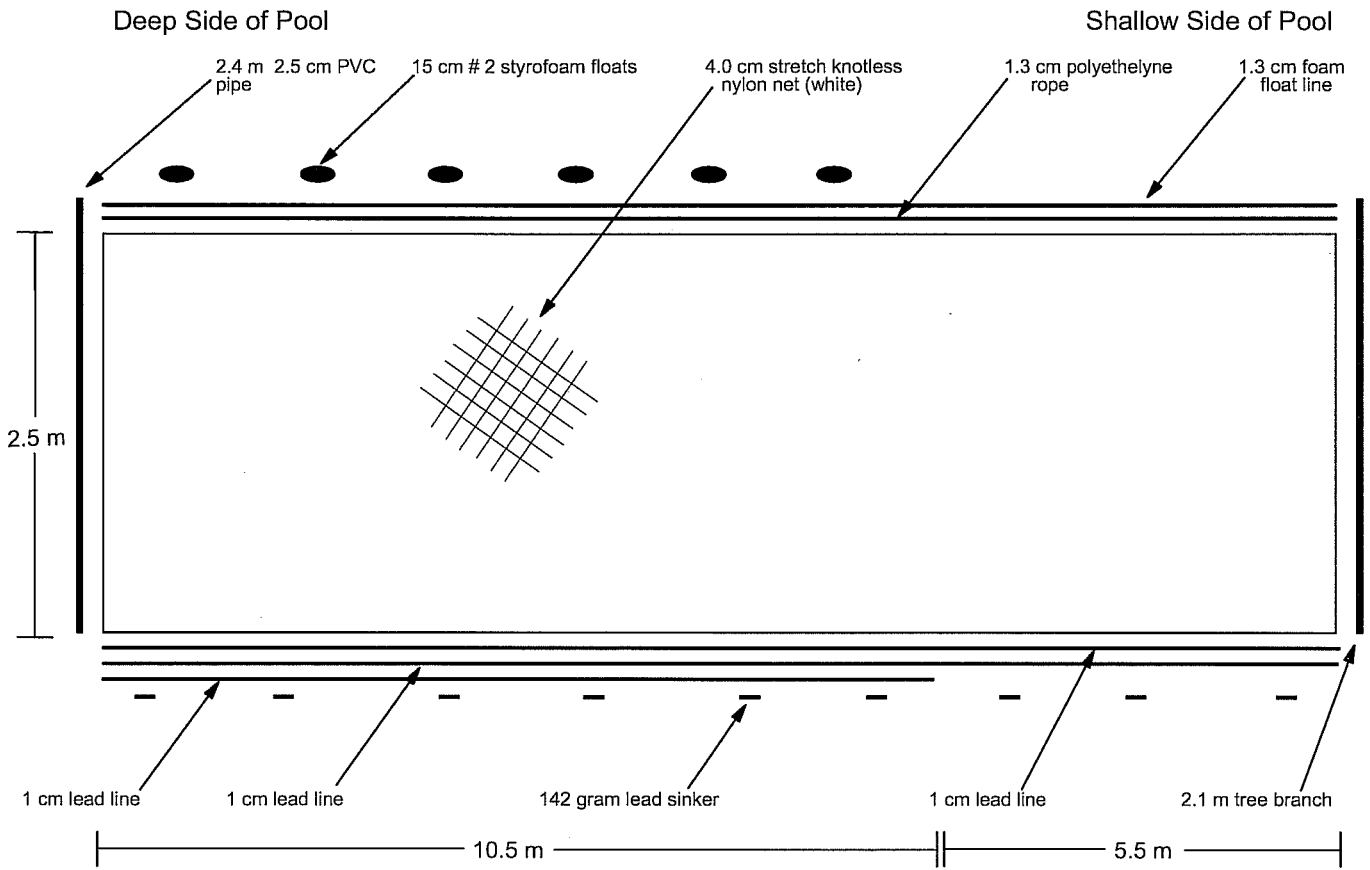


Figure 4. Exploded diagram of seine net used to collect Dolly Varden char from the pools at the spawning and overwintering site on Fish Creek, Rat River, NT.



Figure 5. Picture of net described in Figure 4.



Figure 6. Picture of field crew sweeping the seine net through a pool.

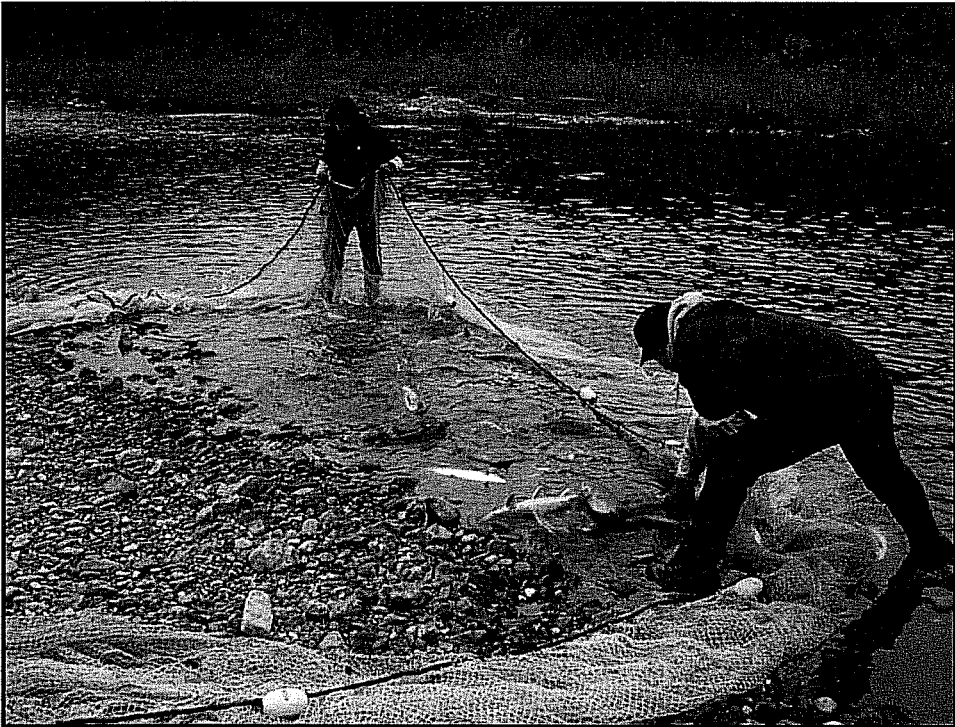


Figure 7. Picture of char being held by the seine net. Fish are removed one by one; measured, tagged and the sex/life history recorded before being released into the pool behind the net.

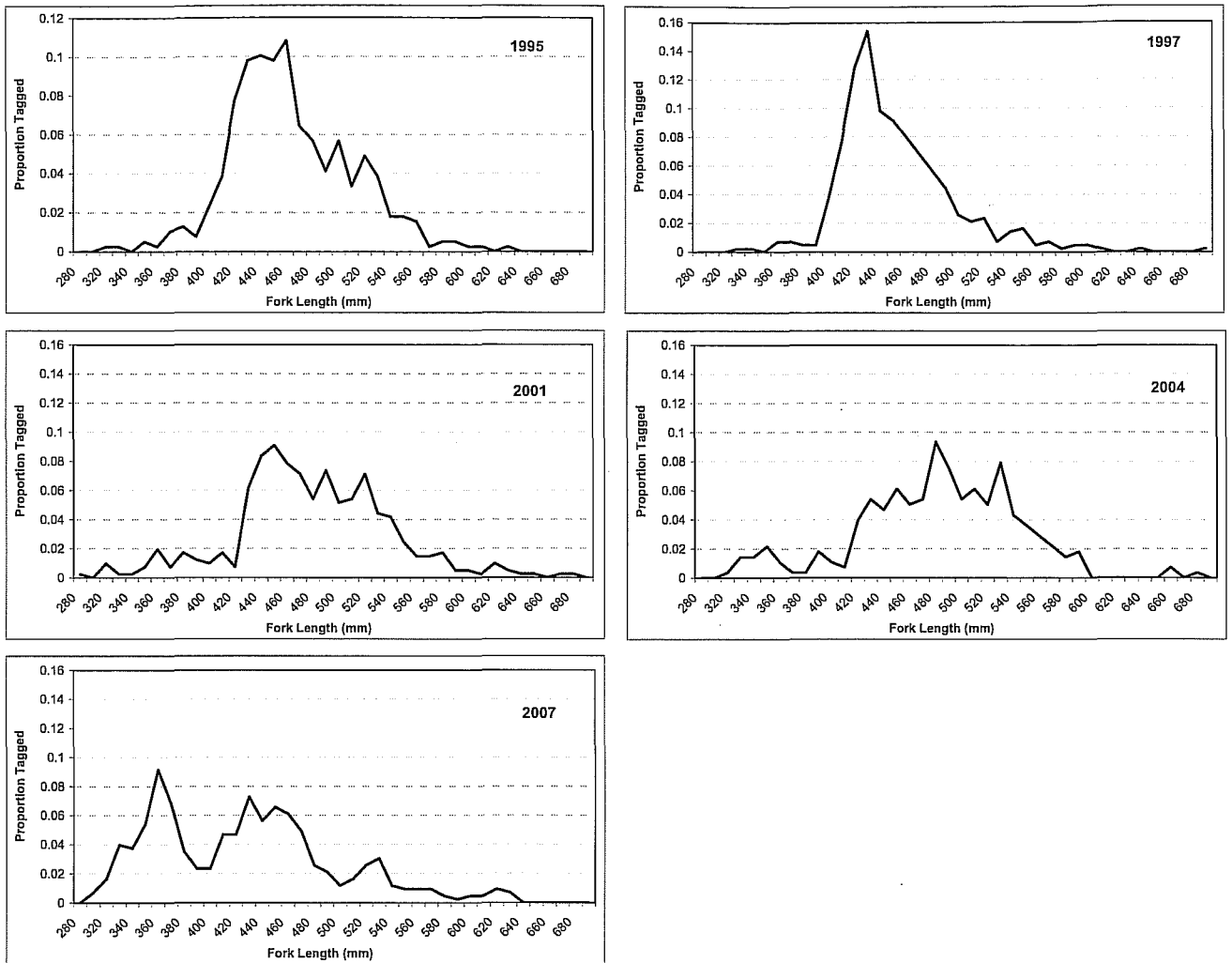


Figure 8. Fork length and number of char tagged by year at the spawning and overwintering site on Fish Creek, Rat River, NT.

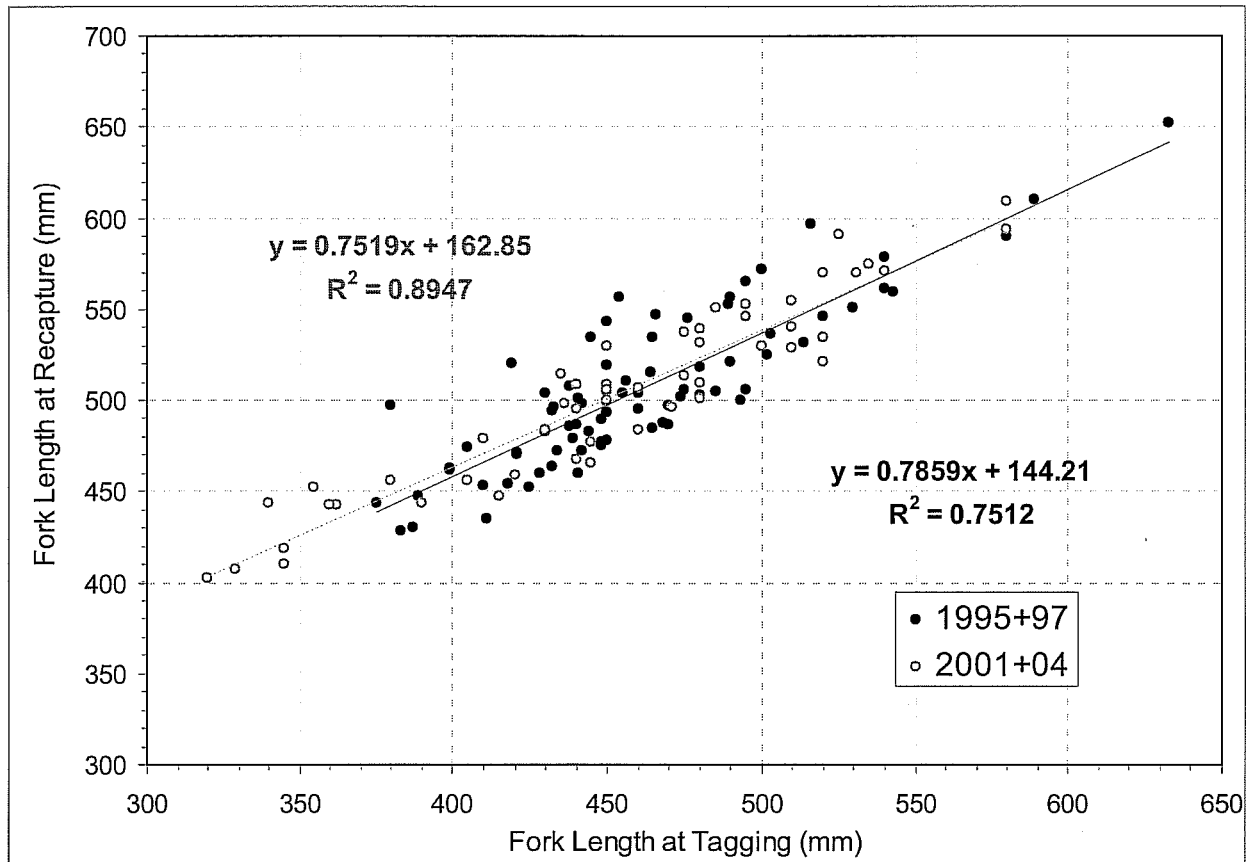


Figure 9. Plot of fork length at tagging vs fork length at recapture (one year later) for Dolly Varden char from the Rat River. Filled symbols are recaptures from 1995 and 1997 and the open circles are recaptures from 2001 and 2004.



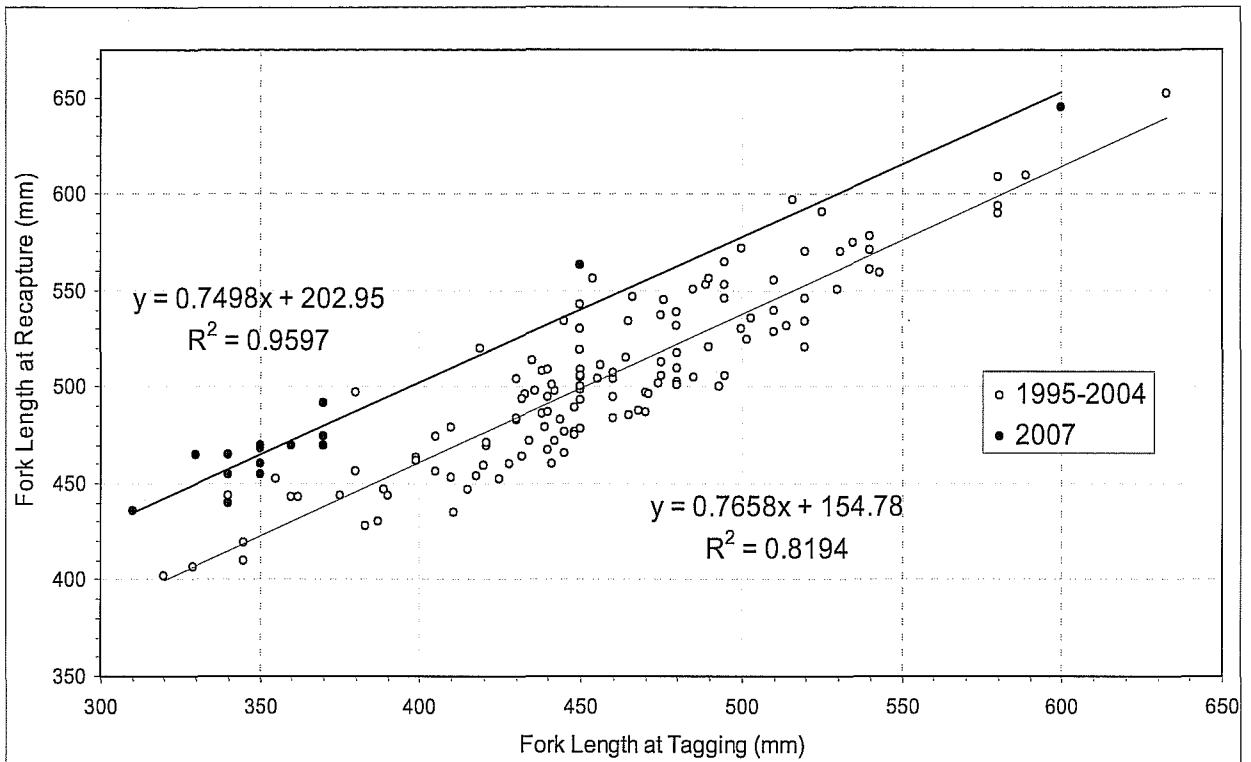


Figure 10. Plot of fork length at tagging vs fork length at recapture (one year later) of Dolly Varden char from the Rat River. Filled symbols are recaptures from 2007 and the open symbols are recaptures from all earlier years combined (1995 to 2004).

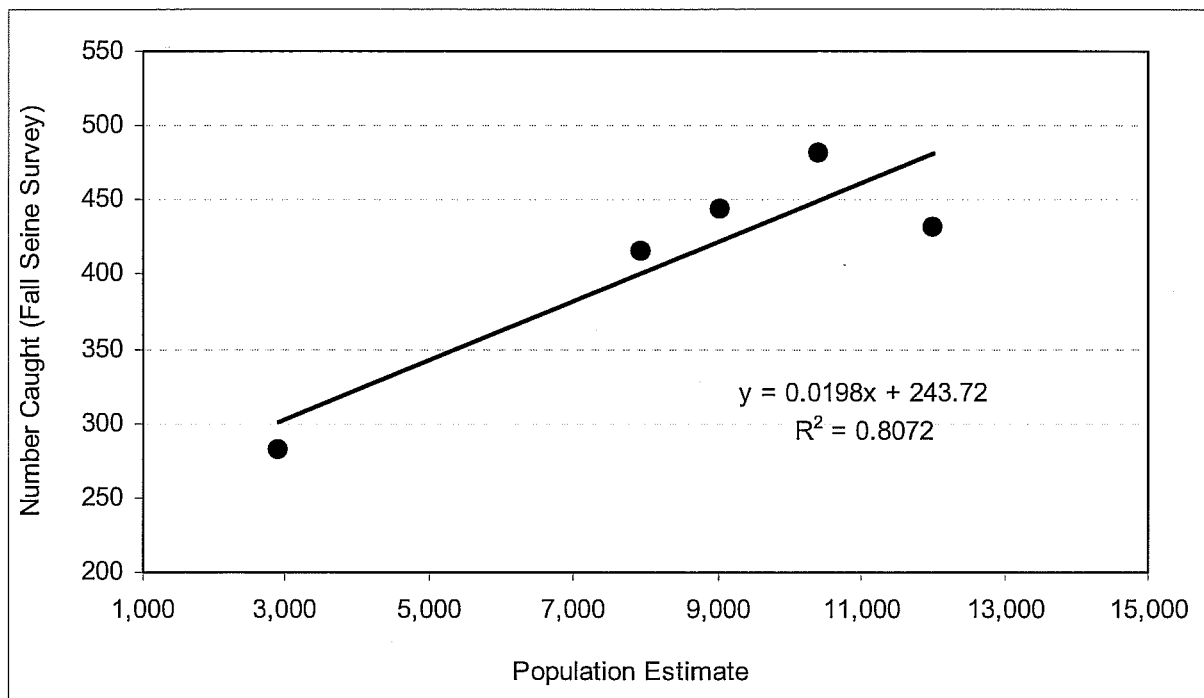


Figure 11. Regression of anadromous population size estimated by ratio of marked to unmarked in the summer harvest and the number of char tagged at the spawning and overwintering site the preceding fall. Effort expended during each survey was approximately equal and all fish caught were tagged.

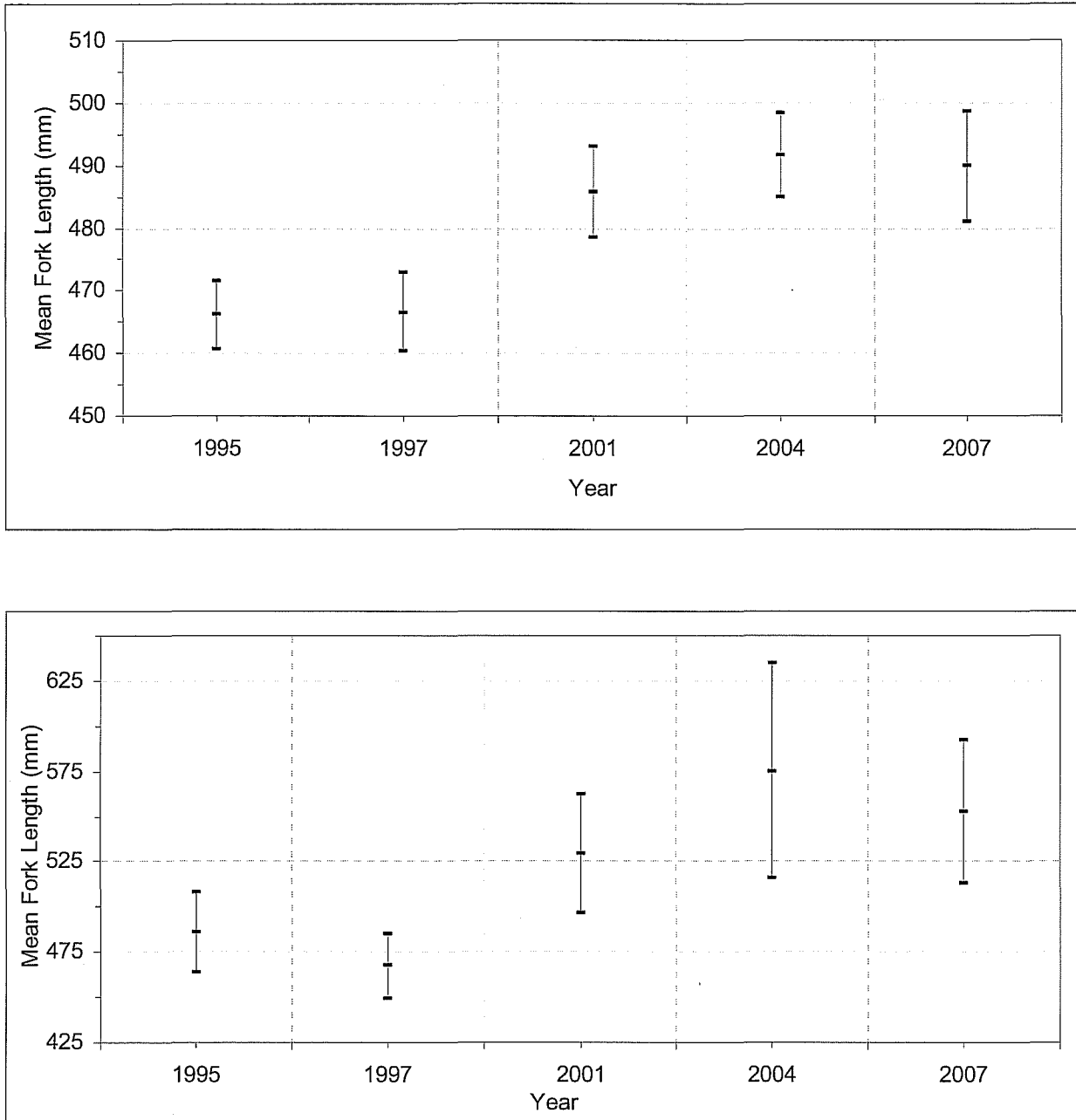


Figure 12. Mean fork length and 95% confidence interval of andromous female (top panel) and andromous male (bottom panel) Dolly Varden char caught by seine net in each year of the survey at the headwater spawning and overwintering site on Fish Creek, Rat River, NT.

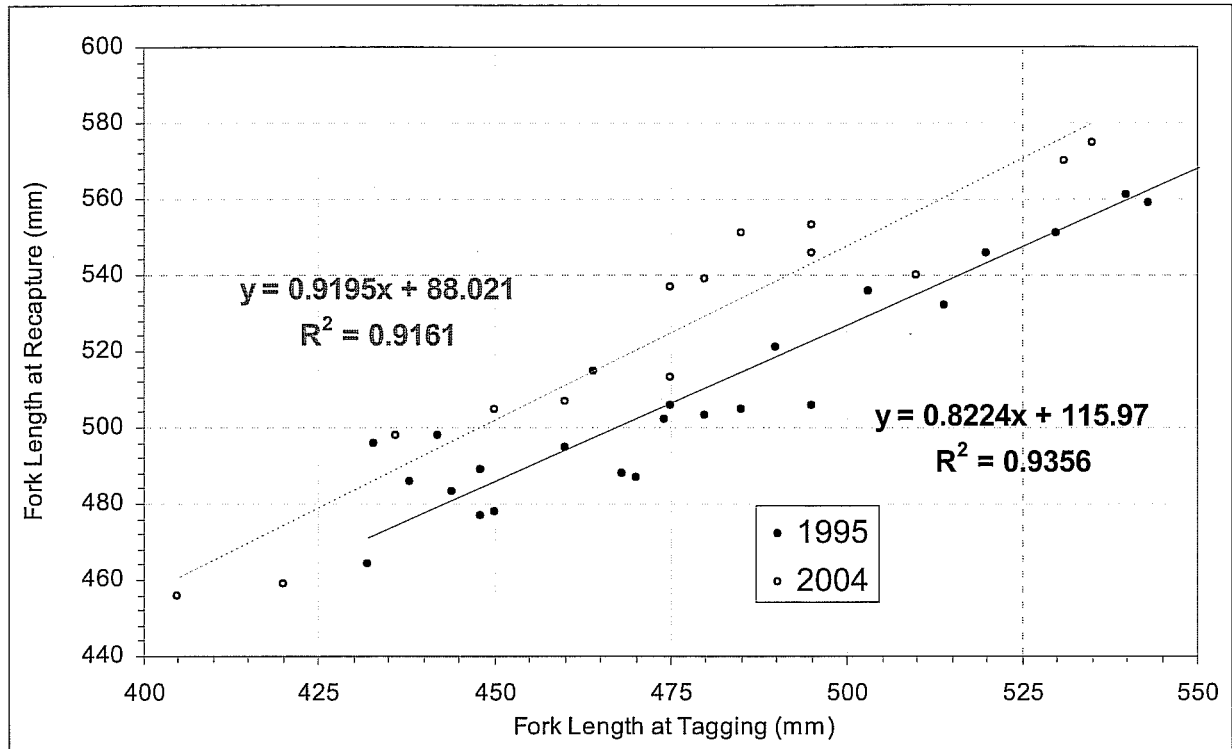


Figure 13. Plot of adult female Dolly Varden char fork length at tagging vs length at recapture one year later. All fish were tagged as mature spawning fish and subsequently recaptured the following year also as a spawning fish, hence, sequential spawners. Grey circles are repeat spawning females from 1996 and filled circles are repeat spawning females from 2005. Regressions are significantly different (Ancova analysis;  $p=0.0288$ ).

Table 1. Life history composition of the seine catch (and fish tagged) at the spawning and overwintering site on Fish Creek, headwater tributary of the Rat River, NT. Results are presented by year of survey. Also present in separate tables are the ratio of spawning females to spawning males observed and total number of tags.

|                             |      |      |      |      |      |
|-----------------------------|------|------|------|------|------|
| Life History Stage          | 1995 | 1997 | 2001 | 2004 | 2007 |
| Juvenile Non-spawner <400mm | 3%   | 2%   | 9%   | 9%   | 37%  |
| Adult Non-spawner >400mm    | 31%  | 44%  | 53%  | 27%  | 39%  |
| Female Spawners             | 60%  | 44%  | 35%  | 62%  | 22%  |
| Male Spawners               | 7%   | 10%  | 3%   | 1%   | 2%   |
| Ratio Female Spawners       | 9.01 | 8.19 | 9.19 | 9.77 | 9.15 |
| Ratio Male Spawners         | 0.99 | 1.81 | 0.81 | 0.23 | 0.85 |
| Total Number Tagged         | 388  | 428  | 407  | 278  | 426  |

Table 2. Population estimates by year along with the variables used to calculate. Estimates of abundances were calculated using the Chapman variation of the Peterson Equation:

$$N = \frac{(M+1)(C+1)}{(R+1)}$$

| Variable Description              | 1995   | 1997   | 2001   | 2004  | 2007    |   |
|-----------------------------------|--------|--------|--------|-------|---------|---|
| Obs. minimum size tagged (mm)     | 320    | 370    | 370    | 320   | 320     |   |
| Est. minimum size examined (mm)   | 400    | 440    | 440    | 400   | 440     |   |
| Harvest year                      | 1996   | 1998   | 2002   | 2005  | 2008    |   |
| No. obs in biological sample      | 732    | 667    | 367    | 255   | 120     |   |
| No. obs in bio sam <min size exam | 57     | 245    | 81     | 12    | 22      |   |
| % obs in bio sam >min size exam   | 92%    | 63%    | 78%    | 95%   | 82%     |   |
| Total catch of monitors           | 1,833  | 1,095  | 539    | 356   | 466     |   |
| Est. total catch > min exam       | 1,690  | 693    | 420    | 339   | 381     | C |
| No. tags caught by monitors       | 66     | 25     | 18     | 29    | 9       | R |
| Obs. minimum size of recaptures   | 408    | 447    | 456    | 402   | 436     |   |
| No. of tags applied               | 388    | 423    | 389    | 278   | 423     |   |
| Annual tag loss rate (%)          | 8%     | 8%     | 8%     | 8%    | 8%      |   |
| No. tags available for capture    | 357    | 389    | 358    | 256   | 389     | M |
| Population Estimate               | 9,036  | 10,411 | 7,953  | 2,912 | 14,887  | N |
| variance                          | 115313 | 386403 | 301960 | 24943 | 1962004 |   |
| standard deviation                | 4      | 6      | 4      | 2     | 4       |   |
| +/- 2 std                         | 1,074  | 1,966  | 1,738  | 499   | 4,429   |   |
|                                   | 2,148  | 3,931  | 3,475  | 999   | 8,859   |   |

## Appendix 1. Raw data collected by project.

|    | Year | Lth | Sex    | Maturity | Tag No | Tag Color | Notes           |
|----|------|-----|--------|----------|--------|-----------|-----------------|
| 1  | 1995 | 372 | female | spawner  | 292    | White     | 703 dead sample |
| 2  | 1995 | 382 | female | spawner  |        |           |                 |
| 3  | 1995 | 387 | female | spawner  | 221    | White     |                 |
| 4  | 1995 | 394 | female | spawner  | 269    | White     |                 |
| 5  | 1995 | 397 | female | spawner  | 69     | White     |                 |
| 6  | 1995 | 402 | female | spawner  | 354    | White     |                 |
| 7  | 1995 | 403 | female | spawner  | 226    | White     |                 |
| 8  | 1995 | 406 | female | spawner  | 260    | White     |                 |
| 9  | 1995 | 408 | female | spawner  | 262    | White     |                 |
| 10 | 1995 | 410 | female | spawner  | 245    | White     |                 |
| 11 | 1995 | 411 | female | spawner  | 276    | White     |                 |
| 12 | 1995 | 411 | female | spawner  | 398    | White     |                 |
| 13 | 1995 | 413 | female | spawner  | 359    | White     |                 |
| 14 | 1995 | 415 | female | spawner  | 268    | White     |                 |
| 15 | 1995 | 416 | female | spawner  | 246    | White     |                 |
| 16 | 1995 | 417 | female | spawner  | 54     | White     |                 |
| 17 | 1995 | 417 | female | spawner  | 271    | White     |                 |
| 18 | 1995 | 419 | female | spawner  |        |           | 711 dead sample |
| 19 | 1995 | 420 | female | spawner  | 181    | White     |                 |
| 20 | 1995 | 420 | female | spawner  | 237    | White     |                 |
| 21 | 1995 | 420 | female | spawner  | 255    | White     |                 |
| 22 | 1995 | 420 | female | spawner  | 277    | White     |                 |
| 23 | 1995 | 421 | female | spawner  | 81     | White     |                 |
| 24 | 1995 | 421 | female | spawner  | 126    | White     |                 |
| 25 | 1995 | 422 | female | spawner  |        |           |                 |
| 26 | 1995 | 423 | female | spawner  | 53     | White     |                 |
| 27 | 1995 | 424 | female | spawner  | 14     | White     |                 |
| 28 | 1995 | 424 | female | spawner  | 43     | White     |                 |
| 29 | 1995 | 424 | female | spawner  | 92     | White     |                 |
| 30 | 1995 | 424 | female | spawner  | 370    | White     |                 |
| 31 | 1995 | 425 | female | spawner  | 266    | White     |                 |
| 32 | 1995 | 425 | female | spawner  | 294    | White     |                 |
| 33 | 1995 | 426 | female | spawner  | 216    | White     |                 |
| 34 | 1995 | 426 | female | spawner  | 318    | White     |                 |
| 35 | 1995 | 426 | female | spawner  | 320    | White     |                 |
| 36 | 1995 | 427 | female | spawner  |        |           | 967 dead sample |
| 37 | 1995 | 428 | female | spawner  | 270    | White     |                 |
| 38 | 1995 | 429 | female | spawner  | 116    | White     |                 |
| 39 | 1995 | 429 | female | spawner  | 209    | White     |                 |
| 40 | 1995 | 429 | female | spawner  | 258    | White     |                 |
| 41 | 1995 | 430 | female | spawner  | 79     | White     |                 |
| 42 | 1995 | 430 | female | spawner  | 154    | White     |                 |
| 43 | 1995 | 430 | female | spawner  | 272    | White     |                 |
| 44 | 1995 | 430 | female | spawner  | 291    | White     |                 |

|    | Year | Lth | Sex    | Maturity | Tag No | Tag Color | Notes           |
|----|------|-----|--------|----------|--------|-----------|-----------------|
| 45 | 1995 | 430 | female | spawner  | 384    | White     |                 |
| 46 | 1995 | 431 | female | spawner  | 149    | White     |                 |
| 47 | 1995 | 431 | female | spawner  | 290    | White     |                 |
| 48 | 1995 | 432 | female | spawner  | 113    | White     |                 |
| 49 | 1995 | 432 | female | spawner  | 220    | White     |                 |
| 50 | 1995 | 432 | female | spawner  | 247    | White     |                 |
| 51 | 1995 | 432 | female | spawner  | 312    | White     |                 |
| 52 | 1995 | 432 | female | spawner  |        |           | 706 dead sample |
| 53 | 1995 | 433 | female | spawner  | 82     | White     |                 |
| 54 | 1995 | 433 | female | spawner  | 202    | White     |                 |
| 55 | 1995 | 434 | female | spawner  | 38     | White     |                 |
| 56 | 1995 | 434 | female | spawner  | 68     | White     |                 |
| 57 | 1995 | 435 | female | spawner  | 51     | White     |                 |
| 58 | 1995 | 435 | female | spawner  | 147    | White     |                 |
| 59 | 1995 | 435 | female | spawner  | 235    | White     |                 |
| 60 | 1995 | 435 | female | spawner  | 267    | White     |                 |
| 61 | 1995 | 435 | female | spawner  | 315    | White     |                 |
| 62 | 1995 | 435 | female | spawner  |        |           | 628 dead sample |
| 63 | 1995 | 436 | female | spawner  | 55     | White     |                 |
| 64 | 1995 | 436 | female | spawner  | 77     | White     |                 |
| 65 | 1995 | 438 | female | spawner  | 37     | White     |                 |
| 66 | 1995 | 438 | female | spawner  | 49     | White     |                 |
| 67 | 1995 | 438 | female | spawner  | 167    | White     |                 |
| 68 | 1995 | 438 | female | spawner  | 242    | White     |                 |
| 69 | 1995 | 438 | female | spawner  | 323    | White     |                 |
| 70 | 1995 | 438 | female | spawner  | 397    | White     |                 |
| 71 | 1995 | 439 | female | spawner  | 240    | White     |                 |
| 72 | 1995 | 439 | female | spawner  | 363    | White     |                 |
| 73 | 1995 | 440 | female | spawner  | 58     | White     |                 |
| 74 | 1995 | 440 | female | spawner  | 275    | White     |                 |
| 75 | 1995 | 440 | female | spawner  | 313    | White     |                 |
| 76 | 1995 | 441 | female | spawner  | 72     | White     |                 |
| 77 | 1995 | 441 | female | spawner  | 85     | White     |                 |
| 78 | 1995 | 441 | female | spawner  | 177    | White     |                 |
| 79 | 1995 | 441 | female | spawner  | 199    | White     |                 |
| 80 | 1995 | 441 | female | spawner  | 250    | White     |                 |
| 81 | 1995 | 442 | female | spawner  | 16     | White     |                 |
| 82 | 1995 | 442 | female | spawner  | 345    | White     |                 |
| 83 | 1995 | 443 | female | spawner  |        |           | 512 dead sample |
| 84 | 1995 | 444 | female | spawner  | 215    | White     |                 |
| 85 | 1995 | 444 | female | spawner  | 288    | White     |                 |
| 86 | 1995 | 444 | female | spawner  | 293    | White     |                 |
| 87 | 1995 | 445 | female | spawner  | 152    | White     |                 |
| 88 | 1995 | 445 | female | spawner  | 281    | White     |                 |
| 89 | 1995 | 445 | female | spawner  | 356    | White     |                 |
| 90 | 1995 | 445 | female | spawner  | 382    | White     |                 |
| 91 | 1995 | 446 | female | spawner  | 134    | White     |                 |

|     | Year | Lth | Sex    | Maturity | Tag No | Tag Color | Notes           |
|-----|------|-----|--------|----------|--------|-----------|-----------------|
| 92  | 1995 | 446 | female | spawner  | 217    | White     |                 |
| 93  | 1995 | 447 | female | spawner  | 138    | White     |                 |
| 94  | 1995 | 447 | female | spawner  | 153    | White     |                 |
| 95  | 1995 | 447 | female | spawner  | 156    | White     |                 |
| 96  | 1995 | 448 | female | spawner  | 83     | White     |                 |
| 97  | 1995 | 448 | female | spawner  | 130    | White     |                 |
| 98  | 1995 | 448 | female | spawner  | 159    | White     |                 |
| 99  | 1995 | 448 | female | spawner  | 284    | White     |                 |
| 100 | 1995 | 448 | female | spawner  |        |           | 707 dead sample |
| 101 | 1995 | 449 | female | spawner  | 332    | White     |                 |
| 102 | 1995 | 450 | female | spawner  | 32     | White     |                 |
| 103 | 1995 | 450 | female | spawner  | 33     | White     |                 |
| 104 | 1995 | 450 | female | spawner  | 179    | White     |                 |
| 105 | 1995 | 450 | female | spawner  | 205    | White     |                 |
| 106 | 1995 | 450 | female | spawner  | 234    | White     |                 |
| 107 | 1995 | 450 | female | spawner  | 274    | White     |                 |
| 108 | 1995 | 450 | female | spawner  |        |           | 617 dead sample |
| 109 | 1995 | 451 | female | spawner  | 124    | White     |                 |
| 110 | 1995 | 452 | female | spawner  | 213    | White     |                 |
| 111 | 1995 | 452 | female | spawner  | 265    | White     |                 |
| 112 | 1995 | 452 | female | spawner  | 334    | White     |                 |
| 113 | 1995 | 452 | female | spawner  |        |           | 968 dead sample |
| 114 | 1995 | 453 | female | spawner  | 67     | White     |                 |
| 115 | 1995 | 453 | female | spawner  |        |           | 619 dead sample |
| 116 | 1995 | 454 | female | spawner  | 87     | White     |                 |
| 117 | 1995 | 454 | female | spawner  | 211    | White     |                 |
| 118 | 1995 | 454 | female | spawner  | 241    | White     |                 |
| 119 | 1995 | 454 | female | spawner  | 328    | White     |                 |
| 120 | 1995 | 455 | female | spawner  | 105    | White     |                 |
| 121 | 1995 | 455 | female | spawner  | 158    | White     |                 |
| 122 | 1995 | 455 | female | spawner  | 352    | White     |                 |
| 123 | 1995 | 455 | female | spawner  | 355    | White     |                 |
| 124 | 1995 | 455 | female | spawner  | 386    | White     |                 |
| 125 | 1995 | 455 | female | spawner  | 394    | White     |                 |
| 126 | 1995 | 455 | female | spawner  |        |           | 708 dead sample |
| 127 | 1995 | 455 | female | spawner  |        |           | 969 dead sample |
| 128 | 1995 | 456 | female | spawner  | 19     | White     |                 |
| 129 | 1995 | 456 | female | spawner  | 125    | White     |                 |
| 130 | 1995 | 456 | female | spawner  | 172    | White     |                 |
| 131 | 1995 | 456 | female | spawner  | 232    | White     |                 |
| 132 | 1995 | 457 | female | spawner  | 133    | White     |                 |
| 133 | 1995 | 457 | female | spawner  |        |           | 704 dead sample |
| 134 | 1995 | 458 | female | spawner  | 41     | White     |                 |
| 135 | 1995 | 458 | female | spawner  | 145    | White     |                 |



|     | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b>    |
|-----|-------------|------------|------------|-----------------|---------------|------------------|-----------------|
| 136 | 1995        | 459        | female     | spawner         | 163           | White            |                 |
| 137 | 1995        | 459        | female     | spawner         | 229           | White            |                 |
| 138 | 1995        | 459        | female     | spawner         | 360           | White            |                 |
| 139 | 1995        | 459        | female     | spawner         | 373           | White            |                 |
| 140 | 1995        | 459        | female     | spawner         |               |                  | 709 dead sample |
| 141 | 1995        | 460        | female     | spawner         | 18            | White            |                 |
| 142 | 1995        | 460        | female     | spawner         | 73            | White            |                 |
| 143 | 1995        | 460        | female     | spawner         | 110           | White            |                 |
| 144 | 1995        | 460        | female     | spawner         | 395           | White            |                 |
| 145 | 1995        | 460        | female     | spawner         |               |                  | 971 dead sample |
| 146 | 1995        | 461        | female     | spawner         | 44            | White            |                 |
| 147 | 1995        | 461        | female     | spawner         | 161           | White            |                 |
| 148 | 1995        | 461        | female     | spawner         | 261           | White            |                 |
| 149 | 1995        | 462        | female     | spawner         | 42            | White            |                 |
| 150 | 1995        | 462        | female     | spawner         | 47            | White            |                 |
| 151 | 1995        | 463        | female     | spawner         | 243           | White            |                 |
| 152 | 1995        | 463        | female     | spawner         |               |                  | 624 dead sample |
| 153 | 1995        | 464        | female     | spawner         | 45            | White            |                 |
| 154 | 1995        | 464        | female     | spawner         | 136           | White            |                 |
| 155 | 1995        | 464        | female     | spawner         | 314           | White            |                 |
| 156 | 1995        | 465        | female     | spawner         | 7             | White            |                 |
| 157 | 1995        | 465        | female     | spawner         | 137           | White            |                 |
| 158 | 1995        | 465        | female     | spawner         | 144           | White            |                 |
| 159 | 1995        | 465        | female     | spawner         | 155           | White            |                 |
| 160 | 1995        | 465        | female     | spawner         | 208           | White            |                 |
| 161 | 1995        | 465        | female     | spawner         | 253           | White            |                 |
| 162 | 1995        | 466        | female     | spawner         | 91            | White            |                 |
| 163 | 1995        | 467        | female     | spawner         | 164           | White            |                 |
| 164 | 1995        | 468        | female     | spawner         | 139           | White            |                 |
| 165 | 1995        | 470        | female     | spawner         | 9             | White            |                 |
| 166 | 1995        | 470        | female     | spawner         | 23            | White            |                 |
| 167 | 1995        | 470        | female     | spawner         | 135           | White            |                 |
| 168 | 1995        | 470        | female     | spawner         | 372           | White            |                 |
| 169 | 1995        | 471        | female     | spawner         | 70            | White            |                 |
| 170 | 1995        | 471        | female     | spawner         | 233           | White            |                 |
| 171 | 1995        | 472        | female     | spawner         | 374           | White            |                 |
| 172 | 1995        | 473        | female     | spawner         | 66            | White            |                 |
| 173 | 1995        | 473        | female     | spawner         | 390           | White            |                 |
| 174 | 1995        | 474        | female     | spawner         | 8             | White            |                 |
| 175 | 1995        | 474        | female     | spawner         | 106           | White            |                 |
| 176 | 1995        | 475        | female     | spawner         | 319           | White            |                 |
| 177 | 1995        | 475        | female     | spawner         | 371           | White            |                 |
| 178 | 1995        | 478        | female     | spawner         | 52            | White            |                 |
| 179 | 1995        | 478        | female     | spawner         | 168           | White            |                 |
| 180 | 1995        | 479        | female     | spawner         | 210           | White            |                 |
| 181 | 1995        | 480        | female     | spawner         | 50            | White            |                 |
| 182 | 1995        | 480        | female     | spawner         | 101           | White            |                 |

|     | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b>    |
|-----|-------------|------------|------------|-----------------|---------------|------------------|-----------------|
| 183 | 1995        | 480        | female     | spawner         | 150           | White            |                 |
| 184 | 1995        | 480        | female     | spawner         |               |                  | 963 dead sample |
| 185 | 1995        | 480        | female     | spawner         |               |                  | 966 dead sample |
| 186 | 1995        | 481        | female     | spawner         | 20            | White            |                 |
| 187 | 1995        | 481        | female     | spawner         | 112           | White            |                 |
| 188 | 1995        | 483        | female     | spawner         | 259           | White            |                 |
| 189 | 1995        | 483        | female     | spawner         |               |                  | 631 dead sample |
| 190 | 1995        | 484        | female     | spawner         | 88            | White            |                 |
| 191 | 1995        | 484        | female     | spawner         | 143           | White            |                 |
| 192 | 1995        | 485        | female     | spawner         | 96            | White            |                 |
| 193 | 1995        | 485        | female     | spawner         | 171           | White            |                 |
| 194 | 1995        | 485        | female     | spawner         | 282           | White            |                 |
| 195 | 1995        | 485        | female     | spawner         | 285           | White            |                 |
| 196 | 1995        | 487        | female     | spawner         |               |                  | 972 dead sample |
| 197 | 1995        | 488        | female     | spawner         | 385           | White            |                 |
| 198 | 1995        | 489        | female     | spawner         | 6             | White            |                 |
| 199 | 1995        | 490        | female     | spawner         | 108           | White            |                 |
| 200 | 1995        | 490        | female     | spawner         | 123           | White            |                 |
| 201 | 1995        | 490        | female     | spawner         | 256           | White            |                 |
| 202 | 1995        | 490        | female     | spawner         |               |                  | 970 dead sample |
| 203 | 1995        | 492        | female     | spawner         | 111           | White            |                 |
| 204 | 1995        | 492        | female     | spawner         | 165           | White            |                 |
| 205 | 1995        | 495        | female     | spawner         | 114           | White            |                 |
| 206 | 1995        | 495        | female     | spawner         | 358           | White            |                 |
| 207 | 1995        | 496        | female     | spawner         | 280           | White            |                 |
| 208 | 1995        | 496        | female     | spawner         | 383           | White            |                 |
| 209 | 1995        | 498        | female     | spawner         | 97            | White            |                 |
| 210 | 1995        | 500        | female     | spawner         | 48            | White            |                 |
| 211 | 1995        | 500        | female     | spawner         | 78            | White            |                 |
| 212 | 1995        | 500        | female     | spawner         | 178           | White            |                 |
| 213 | 1995        | 500        | female     | spawner         | 239           | White            |                 |
| 214 | 1995        | 500        | female     | spawner         | 387           | White            |                 |
| 215 | 1995        | 501        | female     | spawner         | 107           | White            |                 |
| 216 | 1995        | 502        | female     | spawner         | 230           | White            |                 |
| 217 | 1995        | 502        | female     | spawner         | 304           | White            |                 |
| 218 | 1995        | 502        | female     | spawner         | 368           | White            |                 |
| 219 | 1995        | 503        | female     | spawner         | 141           | White            |                 |
| 220 | 1995        | 504        | female     | spawner         | 263           | White            |                 |
| 221 | 1995        | 504        | female     | spawner         | 287           | White            |                 |
| 222 | 1995        | 504        | female     | spawner         | 376           | White            |                 |
| 223 | 1995        | 505        | female     | spawner         | 100           | White            |                 |
| 224 | 1995        | 505        | female     | spawner         | 140           | White            |                 |
| 225 | 1995        | 507        | female     | spawner         | 187           | White            |                 |
| 226 | 1995        | 509        | female     | spawner         | 39            | White            |                 |
| 227 | 1995        | 511        | female     | spawner         | 121           | White            |                 |

|     | Year | Lth | Sex    | Maturity | Tag No | Tag Color | Notes   |
|-----|------|-----|--------|----------|--------|-----------|---|
| 228 | 1995 | 514 | female | spawner  | 98     | White     |   |
| 229 | 1995 | 514 | female | spawner  | 306    | White     |   |
| 230 | 1995 | 515 | female | spawner  | 99     | White     |   |
| 231 | 1995 | 515 | female | spawner  | 200    | White     |   |
| 232 | 1995 | 515 | female | spawner  | 201    | White     |   |
| 233 | 1995 | 517 | female | spawner  | 119    | White     |   |
| 234 | 1995 | 518 | female | spawner  | 366    | White     |   |
| 235 | 1995 | 520 | female | spawner  | 115    | White     |   |
| 236 | 1995 | 520 | female | spawner  | 180    | White     |   |
| 237 | 1995 | 520 | female | spawner  | 279    | White     |   |
| 238 | 1995 | 520 | female | spawner  | 379    | White     |   |
| 239 | 1995 | 520 | female | spawner  | 388    | White     |   |
| 240 | 1995 | 522 | female | spawner  | 301    | White     |   |
| 241 | 1995 | 527 | female | spawner  | 46     | White     |   |
| 242 | 1995 | 530 | female | spawner  | 22     | White     |   |
| 243 | 1995 | 531 | female | spawner  | 369    | White     |   |
| 244 | 1995 | 531 | female | spawner  | 378    | White     |   |
| 245 | 1995 | 536 | female | spawner  | 27     | White     |   |
| 246 | 1995 | 537 | female | spawner  | 4      | White     |   |
|     |      |     |        |          |        |           | 1989<br>Recapture<br>70704<br>orange,<br>Dead<br>Sample |
| 247 | 1995 | 539 | female | spawner  |        |           |   |
| 248 | 1995 | 540 | female | spawner  | 64     | White     |   |
| 249 | 1995 | 540 | female | spawner  | 307    | White     |   |
|     |      |     |        |          |        |           | 964 dead<br>sample<br>965 dead<br>sample                |
| 250 | 1995 | 540 | female | spawner  |        |           |   |
| 251 | 1995 | 540 | female | spawner  |        |           |   |
| 252 | 1995 | 543 | female | spawner  | 10     | White     |   |
| 253 | 1995 | 547 | female | spawner  | 175    | White     |   |
| 254 | 1995 | 550 | female | spawner  | 109    | White     |   |
| 255 | 1995 | 550 | female | spawner  | 311    | White     |   |
| 256 | 1995 | 551 | female | spawner  | 162    | White     |   |
| 257 | 1995 | 555 | female | spawner  | 31     | White     |   |
| 258 | 1995 | 555 | female | spawner  | 160    | White     |   |
| 259 | 1995 | 558 | female | spawner  | 396    | White     |   |
| 260 | 1995 | 560 | female | spawner  | 2      | White     |   |
| 261 | 1995 | 565 | female | spawner  | 185    | White     |   |
| 262 | 1995 | 576 | female | spawner  | 146    | White     |   |
| 263 | 1995 | 580 | female | spawner  | 15     | White     |   |
| 264 | 1995 | 590 | female | spawner  | 25     | White     |   |
| 265 | 1995 | 633 | female | spawner  | 188    | White     |   |
| 266 | 1995 | 365 | male   | spawner  | 347    | White     |   |
| 267 | 1995 | 399 | male   | spawner  | 129    | White     |   |
| 268 | 1995 | 401 | male   | spawner  | 56     | White     |   |
| 269 | 1995 | 420 | male   | spawner  | 257    | White     |   |

|     | Year | Lth | Sex  | Maturity | Tag No | Tag Color | Notes           |
|-----|------|-----|------|----------|--------|-----------|-----------------|
| 270 | 1995 | 425 | male | spawner  |        |           | 511 dead sample |
| 271 | 1995 | 429 | male | spawner  |        |           | 621 dead sample |
| 272 | 1995 | 450 | male | spawner  | 252    | White     |                 |
| 273 | 1995 | 460 | male | spawner  | 198    | White     |                 |
| 274 | 1995 | 464 | male | spawner  | 89     | White     |                 |
| 275 | 1995 | 466 | male | spawner  |        |           | 700 dead sample |
| 276 | 1995 | 466 | male | spawner  |        |           | 959 dead sample |
| 277 | 1995 | 468 | male | spawner  |        |           | 712 dead sample |
| 278 | 1995 | 472 | male | spawner  | 273    | White     |                 |
| 279 | 1995 | 474 | male | spawner  |        |           | 503 dead sample |
| 280 | 1995 | 478 | male | spawner  | 35     | White     |                 |
| 281 | 1995 | 480 | male | spawner  | 34     | White     |                 |
| 282 | 1995 | 480 | male | spawner  |        |           | 960 dead sample |
| 283 | 1995 | 491 | male | spawner  |        |           | 515 dead sample |
| 284 | 1995 | 505 | male | spawner  | 227    | White     |                 |
| 285 | 1995 | 506 | male | spawner  |        |           | 961 dead sample |
| 286 | 1995 | 510 | male | spawner  |        |           | 514 dead sample |
| 287 | 1995 | 520 | male | spawner  |        |           | 502 dead sample |
| 288 | 1995 | 524 | male | spawner  | 339    | White     |                 |
| 289 | 1995 | 529 | male | spawner  | 204    | White     |                 |
| 290 | 1995 | 547 | male | spawner  | 151    | White     |                 |
| 291 | 1995 | 560 | male | spawner  |        |           | 630 dead sample |
| 292 | 1995 | 589 | male | spawner  | 128    | White     |                 |
| 293 | 1995 | 601 | male | spawner  | 337    | White     |                 |
| 294 | 1995 | 612 | male | spawner  | 331    | White     |                 |
| 295 | 1995 | 315 |      | silver   | 251    | White     |                 |
| 296 | 1995 | 332 |      | silver   | 264    | White     |                 |
| 297 | 1995 | 345 |      | silver   | 302    | White     |                 |
| 298 | 1995 | 354 |      | silver   | 36     | White     |                 |
| 299 | 1995 | 360 |      | silver   | 225    | White     |                 |
| 300 | 1995 | 365 |      | silver   | 65     | White     |                 |
| 301 | 1995 | 365 |      | silver   | 296    | White     |                 |
| 302 | 1995 | 375 |      | silver   | 393    | White     |                 |
| 303 | 1995 | 376 |      | silver   | 236    | White     |                 |
| 304 | 1995 | 380 |      | silver   | 346    | White     |                 |
| 305 | 1995 | 383 |      | silver   | 289    | White     |                 |
| 306 | 1995 | 384 |      | silver   | 71     | White     |                 |
| 307 | 1995 | 385 |      | silver   | 340    | White     |                 |
| 308 | 1995 | 396 |      | silver   | 299    | White     |                 |
| 309 | 1995 | 400 |      | silver   | 298    | White     |                 |

|     | Year | Lth | Sex | Maturity | Tag No | Tag Color | Notes           |
|-----|------|-----|-----|----------|--------|-----------|-----------------|
| 310 | 1995 | 400 |     | silver   | 343    | White     |                 |
| 311 | 1995 | 402 |     | silver   | 325    | White     |                 |
| 312 | 1995 | 405 |     | silver   | 224    | White     |                 |
| 313 | 1995 | 406 |     | silver   | 228    | White     |                 |
| 314 | 1995 | 408 |     | silver   | 342    | White     |                 |
| 315 | 1995 | 410 |     | silver   | 102    | White     |                 |
| 316 | 1995 | 410 |     | silver   | 364    | White     |                 |
| 317 | 1995 | 410 |     | silver   | 365    | White     |                 |
| 318 | 1995 | 410 |     | silver   |        |           | 636 dead sample |
| 319 | 1995 | 412 |     | silver   | 218    | White     |                 |
| 320 | 1995 | 412 |     | silver   | 333    | White     |                 |
| 321 | 1995 | 414 |     | silver   | 380    | White     |                 |
| 322 | 1995 | 415 |     | silver   | 194    | White     |                 |
| 323 | 1995 | 415 |     | silver   | 197    | White     |                 |
| 324 | 1995 | 415 |     | silver   |        |           | 639 dead sample |
| 325 | 1995 | 418 |     | silver   | 278    | White     |                 |
| 326 | 1995 | 419 |     | silver   | 95     | White     |                 |
| 327 | 1995 | 419 |     | silver   | 322    | White     |                 |
| 328 | 1995 | 419 |     | silver   | 350    | White     |                 |
| 329 | 1995 | 420 |     | silver   | 286    | White     |                 |
| 330 | 1995 | 421 |     | silver   | 238    | White     |                 |
| 331 | 1995 | 421 |     | silver   | 295    | White     |                 |
| 332 | 1995 | 421 |     | silver   | 300    | White     |                 |
| 333 | 1995 | 422 |     | silver   | 223    | White     |                 |
| 334 | 1995 | 424 |     | silver   | 90     | White     |                 |
| 335 | 1995 | 424 |     | silver   | 249    | White     |                 |
| 336 | 1995 | 424 |     | silver   | 327    | White     |                 |
| 337 | 1995 | 425 |     | silver   | 244    | White     |                 |
| 338 | 1995 | 426 |     | silver   | 219    | White     |                 |
| 339 | 1995 | 426 |     | silver   | 351    | White     |                 |
| 340 | 1995 | 427 |     | silver   |        |           | 626 dead sample |
| 341 | 1995 | 428 |     | silver   | 94     | White     |                 |
| 342 | 1995 | 428 |     | silver   | 308    | White     |                 |
| 343 | 1995 | 428 |     | silver   | 330    | White     |                 |
| 344 | 1995 | 428 |     | silver   | 392    | White     |                 |
| 345 | 1995 | 429 |     | silver   | 80     | White     | Skinny          |
| 346 | 1995 | 430 |     | silver   | 86     | White     |                 |
| 347 | 1995 | 430 |     | silver   | 400    | White     |                 |
| 348 | 1995 | 431 |     | silver   | 389    | White     |                 |
| 349 | 1995 | 431 |     | silver   |        |           | 622 dead sample |
| 350 | 1995 | 433 |     | silver   | 189    | White     |                 |
| 351 | 1995 | 433 |     | silver   |        |           | 623 dead sample |
| 352 | 1995 | 434 |     | silver   | 335    | White     |                 |
| 353 | 1995 | 434 |     | silver   | 391    | White     |                 |
| 354 | 1995 | 435 |     | silver   | 75     | White     |                 |

|     | Year | Lth | Sex | Maturity | Tag No | Tag Color | Notes                              |
|-----|------|-----|-----|----------|--------|-----------|------------------------------------|
| 355 | 1995 | 435 |     | silver   | 193    | White     |                                    |
| 356 | 1995 | 435 |     | silver   | 231    | White     |                                    |
| 357 | 1995 | 435 |     | silver   | 367    | White     |                                    |
| 358 | 1995 | 436 |     | silver   | 166    | White     |                                    |
| 359 | 1995 | 436 |     | silver   | 344    | White     |                                    |
| 360 | 1995 | 436 |     | silver   |        |           | 627 dead sample                    |
| 361 | 1995 | 437 |     | silver   | 336    | White     |                                    |
| 362 | 1995 | 437 |     | silver   |        |           | 633 dead sample                    |
| 363 | 1995 | 439 |     | silver   | 341    | White     |                                    |
| 364 | 1995 | 441 |     | silver   |        |           | 637 dead sample                    |
| 365 | 1995 | 442 |     | silver   | 316    | White     |                                    |
| 366 | 1995 | 443 |     | silver   | 254    | White     |                                    |
| 367 | 1995 | 443 |     | silver   |        |           | 625 dead sample<br>634 dead sample |
| 368 | 1995 | 443 |     | silver   |        |           |                                    |
| 369 | 1995 | 444 |     | silver   | 348    | White     |                                    |
| 370 | 1995 | 445 |     | silver   |        |           | 616 dead sample                    |
| 371 | 1995 | 445 |     | silver   |        |           | 958 dead sample<br>962 dead sample |
| 372 | 1995 | 445 |     | silver   |        |           |                                    |
| 373 | 1995 | 447 |     | silver   | 170    | White     |                                    |
| 374 | 1995 | 447 |     | silver   | 248    | White     |                                    |
| 375 | 1995 | 448 |     | silver   | 297    | White     |                                    |
| 376 | 1995 | 449 |     | silver   |        |           | 710 dead sample                    |
| 377 | 1995 | 450 |     | silver   | 203    | White     |                                    |
| 378 | 1995 | 450 |     | silver   | 303    | White     |                                    |
| 379 | 1995 | 450 |     | silver   | 326    | White     |                                    |
| 380 | 1995 | 454 |     | silver   | 1      |           | 1989 Recapture                     |
| 381 | 1995 | 454 |     | silver   | 283    | White     |                                    |
| 382 | 1995 | 454 |     | silver   | 321    | White     |                                    |
| 383 | 1995 | 455 |     | silver   | 174    | White     |                                    |
| 384 | 1995 | 455 |     | silver   |        |           | 701 dead sample                    |
| 385 | 1995 | 457 |     | silver   | 157    | White     |                                    |
| 386 | 1995 | 458 |     | silver   | 3      | White     |                                    |
| 387 | 1995 | 459 |     | silver   | 207    | White     |                                    |
| 388 | 1995 | 460 |     | silver   | 142    | White     |                                    |
| 389 | 1995 | 460 |     | silver   | 196    | White     |                                    |
| 390 | 1995 | 460 |     | silver   | 309    | White     |                                    |
| 391 | 1995 | 462 |     | silver   | 182    | White     |                                    |
| 392 | 1995 | 462 |     | silver   | 184    | White     |                                    |
| 393 | 1995 | 463 |     | silver   | 190    | White     |                                    |
| 394 | 1995 | 470 |     | silver   | 5      | White     |                                    |

|     | Year | Lth | Sex | Maturity | Tag No | Tag Color | Notes           |
|-----|------|-----|-----|----------|--------|-----------|-----------------|
| 395 | 1995 | 470 |     | silver   | 357    | White     |                 |
| 396 | 1995 | 472 |     | silver   | 148    | White     |                 |
| 397 | 1995 | 474 |     | silver   | 62     | White     |                 |
| 398 | 1995 | 475 |     | silver   | 212    | White     |                 |
| 399 | 1995 | 476 |     | silver   | 206    | White     |                 |
| 400 | 1995 | 476 |     | silver   | 317    | White     |                 |
| 401 | 1995 | 480 |     | silver   | 40     | White     |                 |
| 402 | 1995 | 480 |     | silver   | 399    | White     |                 |
| 403 | 1995 | 481 |     | silver   | 29     | White     |                 |
| 404 | 1995 | 482 |     | silver   | 377    | White     |                 |
| 405 | 1995 | 489 |     | silver   | 324    | White     |                 |
| 406 | 1995 | 489 |     | silver   | 349    | White     |                 |
| 407 | 1995 | 490 |     | silver   | 63     | White     |                 |
| 408 | 1995 | 490 |     | silver   | 103    | White     |                 |
| 409 | 1995 | 490 |     | silver   |        |           | 632 dead sample |
| 410 | 1995 | 493 |     | silver   | 186    | White     |                 |
| 411 | 1995 | 495 |     | silver   | 191    | White     |                 |
| 412 | 1995 | 495 |     | silver   | 362    | White     |                 |
| 413 | 1995 | 498 |     | silver   | 30     | White     |                 |
| 414 | 1995 | 500 |     | silver   | 353    | White     |                 |
| 415 | 1995 | 506 |     | silver   |        |           | 638 dead sample |
| 416 | 1995 | 507 |     | silver   | 118    | White     |                 |
| 417 | 1995 | 509 |     | silver   | 222    | White     |                 |
| 418 | 1995 | 510 |     | silver   | 169    | White     |                 |
| 419 | 1995 | 510 |     | silver   | 375    | White     |                 |
| 420 | 1995 | 514 |     | silver   | 120    | White     |                 |
| 421 | 1995 | 515 |     | silver   | 11     | White     |                 |
| 422 | 1995 | 515 |     | silver   | 329    | White     |                 |
| 423 | 1995 | 520 |     | silver   | 57     | White     |                 |
| 424 | 1995 | 520 |     | silver   | 132    | White     |                 |
| 425 | 1995 | 521 |     | silver   | 338    | White     |                 |
| 426 | 1995 | 522 |     | silver   | 13     | White     |                 |
| 427 | 1995 | 524 |     | silver   | 104    | White     |                 |
| 428 | 1995 | 525 |     | silver   | 122    | White     |                 |
| 429 | 1995 | 525 |     | silver   | 173    | White     |                 |
| 430 | 1995 | 526 |     | silver   | 117    | White     |                 |
| 431 | 1995 | 526 |     | silver   | 214    | White     |                 |
| 432 | 1995 | 527 |     | silver   | 60     | White     |                 |
| 433 | 1995 | 530 |     | silver   | 26     | White     |                 |
| 434 | 1995 | 533 |     | silver   | 1      | White     |                 |
| 435 | 1995 | 534 |     | silver   | 21     | White     |                 |
| 436 | 1995 | 534 |     | silver   | 183    | White     |                 |
| 437 | 1995 | 534 |     | silver   | 305    | White     |                 |
| 438 | 1995 | 540 |     | silver   | 28     | White     |                 |
| 439 | 1995 | 540 |     | silver   | 127    | White     |                 |
| 440 | 1995 | 548 |     | silver   |        |           | 635 dead sample |
| 441 | 1995 | 551 |     | silver   | 310    | White     |                 |

|     | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|-----|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 442 | 1995        | 554        |            | silver          | 12            | White            |              |
| 443 | 1995        | 559        |            | silver          | 17            | White            |              |
| 444 | 1995        | 560        |            | silver          | 195           | White            |              |
| 445 | 1997        | 355        | female     | spawner         | 1016          | Orange           |              |
| 446 | 1997        | 395        | female     | spawner         | 750           | Orange           |              |
| 447 | 1997        | 395        | female     | spawner         | 0973, 0972    | Orange           |              |
| 448 | 1997        | 397        | female     | spawner         | 744           | Orange           |              |
| 449 | 1997        | 399        | female     | spawner         | 0857, 0858    | Orange           |              |
| 450 | 1997        | 399        | female     | spawner         | 878           | Orange           |              |
| 451 | 1997        | 399        | female     | spawner         | 1028, 1029    | Orange           |              |
| 452 | 1997        | 400        | female     | spawner         | 0836, 0837    | Orange           |              |
| 453 | 1997        | 403        | female     | spawner         | 732           | Orange           |              |
| 454 | 1997        | 403        | female     | spawner         | 874           | Orange           |              |
| 455 | 1997        | 405        | female     | spawner         | 515           | Orange           |              |
| 456 | 1997        | 405        | female     | spawner         | 1005          | Orange           |              |
| 457 | 1997        | 408        | female     | spawner         | 641           | Orange           |              |
| 458 | 1997        | 408        | female     | spawner         | 716           | Orange           |              |
| 459 | 1997        | 410        | female     | spawner         | 545           | Orange           |              |
| 460 | 1997        | 410        | female     | spawner         | 927           | Orange           |              |
| 461 | 1997        | 410        | female     | spawner         | 1004          | Orange           |              |
| 462 | 1997        | 411        | female     | spawner         | 537           | Orange           |              |
| 463 | 1997        | 411        | female     | spawner         | 0851, 0852    | Orange           |              |
| 464 | 1997        | 413        | female     | spawner         | 694           | Orange           |              |
| 465 | 1997        | 415        | female     | spawner         | 714           | Orange           |              |
| 466 | 1997        | 415        | female     | spawner         | 1026, 1027    | Orange           |              |
| 467 | 1997        | 416        | female     | spawner         | 0846, 0847    | Orange           |              |
| 468 | 1997        | 417        | female     | spawner         | 549           | Orange           |              |
| 469 | 1997        | 417        | female     | spawner         | 0853, 0854    | Orange           |              |
| 470 | 1997        | 418        | female     | spawner         | 734           | Orange           |              |
| 471 | 1997        | 419        | female     | spawner         | 697           | Orange           |              |
| 472 | 1997        | 420        | female     | spawner         | 749           | Orange           |              |
| 473 | 1997        | 420        | female     | spawner         | 0855, 0856    | Orange           |              |
| 474 | 1997        | 420        | female     | spawner         | 1006          | Orange           |              |
| 475 | 1997        | 422        | female     | spawner         | 581           | Orange           |              |
| 476 | 1997        | 422        | female     | spawner         | 934           | Orange           |              |
| 477 | 1997        | 423        | female     | spawner         | 657           | Orange           |              |
| 478 | 1997        | 423        | female     | spawner         | 0848, 0849    | Orange           |              |
| 479 | 1997        | 424        | female     | spawner         | 706           | Orange           |              |
| 480 | 1997        | 425        | female     | spawner         | 588           | Orange           |              |
| 481 | 1997        | 425        | female     | spawner         | 647           | Orange           |              |
| 482 | 1997        | 425        | female     | spawner         | 662           | Orange           |              |
| 483 | 1997        | 426        | female     | spawner         | 762           | Orange           |              |
| 484 | 1997        | 426        | female     | spawner         | 875           | Orange           |              |
| 485 | 1997        | 428        | female     | spawner         | 0803, 0804    | Orange           |              |
| 486 | 1997        | 429        | female     | spawner         | 904           | Orange           |              |
| 487 | 1997        | 430        | female     | spawner         | 508           | Orange           |              |
| 488 | 1997        | 430        | female     | spawner         | 518           | Orange           |              |
| 489 | 1997        | 430        | female     | spawner         | 0796, 0798    | Orange           |              |
| 490 | 1997        | 430        | female     | spawner         | 0838, 0839    | Orange           |              |



|     | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|-----|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 491 | 1997        | 431        | female     | spawner         | 529           | Orange           |              |
| 492 | 1997        | 431        | female     | spawner         | 628           | Orange           |              |
| 493 | 1997        | 431        | female     | spawner         | 636           | Orange           |              |
| 494 | 1997        | 431        | female     | spawner         | 0807, 0808    | Orange           |              |
| 495 | 1997        | 432        | female     | spawner         | 764           | Orange           |              |
| 496 | 1997        | 433        | female     | spawner         | 0817, 0818    | Orange           |              |
| 497 | 1997        | 434        | female     | spawner         | 592           | Orange           |              |
| 498 | 1997        | 434        | female     | spawner         | 728           | Orange           |              |
| 499 | 1997        | 435        | female     | spawner         | 538           | Orange           |              |
| 500 | 1997        | 435        | female     | spawner         | 746           | Orange           |              |
| 501 | 1997        | 435        | female     | spawner         | 1007          | Orange           |              |
| 502 | 1997        | 438        | female     | spawner         | 0742, 0743    | Orange           |              |
| 503 | 1997        | 440        | female     | spawner         | 548           | Orange           |              |
| 504 | 1997        | 440        | female     | spawner         | 0967, 0968    | Orange           |              |
| 505 | 1997        | 441        | female     | spawner         | 1030, 1032    | Orange           |              |
| 506 | 1997        | 443        | female     | spawner         | 584           | Orange           |              |
| 507 | 1997        | 444        | female     | spawner         | 603           | Orange           |              |
| 508 | 1997        | 444        | female     | spawner         | 607           | Orange           |              |
| 509 | 1997        | 445        | female     | spawner         | 507           | Orange           |              |
| 510 | 1997        | 445        | female     | spawner         | 606           | Orange           |              |
| 511 | 1997        | 445        | female     | spawner         | 877           | Orange           |              |
| 512 | 1997        | 445        | female     | spawner         | 937           | Orange           |              |
| 513 | 1997        | 445        | female     | spawner         | 946           | Orange           |              |
| 514 | 1997        | 446        | female     | spawner         | 618           | Orange           |              |
| 515 | 1997        | 448        | female     | spawner         | 905           | Orange           |              |
| 516 | 1997        | 448        | female     | spawner         | 1022, 1023    | Orange           |              |
| 517 | 1997        | 449        | female     | spawner         | 953           | Orange           |              |
| 518 | 1997        | 450        | female     | spawner         | 503           | Orange           |              |
| 519 | 1997        | 450        | female     | spawner         | 590           | Orange           |              |
| 520 | 1997        | 452        | female     | spawner         | 567           | Orange           |              |
| 521 | 1997        | 453        | female     | spawner         | 740           | Orange           |              |
| 522 | 1997        | 453        | female     | spawner         | 955           | Orange           |              |
| 523 | 1997        | 454        | female     | spawner         | 540           | Orange           |              |
| 524 | 1997        | 454        | female     | spawner         | 676           | Orange           |              |
| 525 | 1997        | 454        | female     | spawner         | 0829, 0830    | Orange           |              |
| 526 | 1997        | 455        | female     | spawner         | 649           | Orange           |              |
| 527 | 1997        | 455        | female     | spawner         | 962           | Orange           |              |
| 528 | 1997        | 458        | female     | spawner         | 585           | Orange           |              |
| 529 | 1997        | 459        | female     | spawner         | 602           | Orange           |              |
| 530 | 1997        | 459        | female     | spawner         | 882           | Orange           |              |
| 531 | 1997        | 460        | female     | spawner         | 589           | Orange           |              |
| 532 | 1997        | 460        | female     | spawner         | 634           | Orange           |              |
| 533 | 1997        | 460        | female     | spawner         | 699           | Orange           |              |
| 534 | 1997        | 460        | female     | spawner         | 0792, 0793    | Orange           |              |
| 535 | 1997        | 460        | female     | spawner         | 1011          | Orange           |              |
| 536 | 1997        | 462        | female     | spawner         | 621           | Orange           |              |
| 537 | 1997        | 462        | female     | spawner         | 678           | Orange           |              |
| 538 | 1997        | 463        | female     | spawner         | 535           | Orange           |              |
| 539 | 1997        | 464        | female     | spawner         | 0996, 0998    | Orange           |              |

|     | Year | Lth | Sex    | Maturity | Tag No     | Tag Color | Notes             |
|-----|------|-----|--------|----------|------------|-----------|-------------------|
| 540 | 1997 | 465 | female | spawner  | 615        | Orange    |                   |
| 541 | 1997 | 465 | female | spawner  | 632        | Orange    |                   |
| 542 | 1997 | 465 | female | spawner  | 928        | Orange    |                   |
| 543 | 1997 | 467 | female | spawner  | 0819, 0820 | Orange    |                   |
| 544 | 1997 | 467 | female | spawner  | 0861, 0862 | Orange    |                   |
| 545 | 1997 | 468 | female | spawner  | 642        | Orange    |                   |
| 546 | 1997 | 468 | female | spawner  | 704        | Orange    |                   |
| 547 | 1997 | 469 | female | spawner  | 654        | Orange    |                   |
| 548 | 1997 | 469 | female | spawner  | 663        | Orange    |                   |
| 549 | 1997 | 469 | female | spawner  | 0799, 0800 | Orange    |                   |
| 550 | 1997 | 470 | female | spawner  | 75         | White     | 1995<br>Recapture |
| 551 | 1997 | 470 | female | spawner  | 512        | Orange    |                   |
| 552 | 1997 | 470 | female | spawner  | 521        | Orange    |                   |
| 553 | 1997 | 470 | female | spawner  | 556        | Orange    |                   |
| 554 | 1997 | 470 | female | spawner  | 629        | Orange    |                   |
| 555 | 1997 | 470 | female | spawner  | 640        | Orange    |                   |
| 556 | 1997 | 470 | female | spawner  | 721        | Orange    |                   |
| 557 | 1997 | 470 | female | spawner  | 738        | Orange    |                   |
| 558 | 1997 | 470 | female | spawner  | 970        | Orange    |                   |
| 559 | 1997 | 470 | female | spawner  | 0994, 0995 | Orange    |                   |
| 560 | 1997 | 471 | female | spawner  | 75         | White     | 1995<br>Recapture |
| 561 | 1997 | 472 | female | spawner  | 619        | Orange    |                   |
| 562 | 1997 | 473 | female | spawner  | 1001       | Orange    |                   |
| 563 | 1997 | 474 | female | spawner  | 0790, 0791 | Orange    |                   |
| 564 | 1997 | 475 | female | spawner  | 565        | Orange    |                   |
| 565 | 1997 | 475 | female | spawner  | 604        | Orange    |                   |
| 566 | 1997 | 475 | female | spawner  | 635        | Orange    |                   |
| 567 | 1997 | 475 | female | spawner  | 674        | Orange    |                   |
| 568 | 1997 | 475 | female | spawner  | 907        | Orange    |                   |
| 569 | 1997 | 475 | female | spawner  | 989        | Orange    |                   |
| 570 | 1997 | 476 | female | spawner  | 683        | Orange    |                   |
| 571 | 1997 | 477 | female | spawner  | 903        | Orange    |                   |
| 572 | 1997 | 477 | female | spawner  | 940        | Orange    |                   |
| 573 | 1997 | 478 | female | spawner  | 557        | Orange    |                   |
| 574 | 1997 | 478 | female | spawner  | 709        | Orange    |                   |
| 575 | 1997 | 478 | female | spawner  | 0788, 0789 | Orange    |                   |
| 576 | 1997 | 480 | female | spawner  | 625        | Orange    |                   |
| 577 | 1997 | 480 | female | spawner  | 880        | Orange    |                   |
| 578 | 1997 | 482 | female | spawner  | 737        | Orange    |                   |
| 579 | 1997 | 485 | female | spawner  | 520        | Orange    |                   |
| 580 | 1997 | 485 | female | spawner  | 587        | Orange    |                   |
| 581 | 1997 | 485 | female | spawner  | 761        | Orange    |                   |
| 582 | 1997 | 486 | female | spawner  | 893        | Orange    |                   |
| 583 | 1997 | 487 | female | spawner  | 1012, 1013 | Orange    |                   |
| 584 | 1997 | 488 | female | spawner  | 881        | Orange    |                   |
| 585 | 1997 | 488 | female | spawner  | 954        | Orange    |                   |
| 586 | 1997 | 490 | female | spawner  | 564        | Orange    |                   |
| 587 | 1997 | 490 | female | spawner  | 610        | Orange    |                   |

|     | Year | Lth | Sex    | Maturity | Tag No     | Tag Color | Notes             |
|-----|------|-----|--------|----------|------------|-----------|-------------------|
| 588 | 1997 | 490 | female | spawner  | 0801, 0802 | Orange    |                   |
| 589 | 1997 | 491 | female | spawner  | 559        | Orange    |                   |
| 590 | 1997 | 492 | female | spawner  | 536        | Orange    |                   |
| 591 | 1997 | 494 | female | spawner  | 593        | Orange    |                   |
| 592 | 1997 | 495 | female | spawner  | 211        | White     | 1995<br>Recapture |
| 593 | 1997 | 495 | female | spawner  | 591        | Orange    |                   |
| 594 | 1997 | 496 | female | spawner  | 0533, 0152 | Orange    |                   |
| 595 | 1997 | 496 | female | spawner  | 941        | Orange    |                   |
| 596 | 1997 | 498 | female | spawner  | 0794, 0795 | Orange    |                   |
| 597 | 1997 | 500 | female | spawner  | 505        | Orange    |                   |
| 598 | 1997 | 500 | female | spawner  | 510        | Orange    |                   |
| 599 | 1997 | 500 | female | spawner  | 598        | Orange    |                   |
| 600 | 1997 | 503 | female | spawner  | 561        | Orange    |                   |
| 601 | 1997 | 503 | female | spawner  | 562        | Orange    |                   |
| 602 | 1997 | 505 | female | spawner  | 92         | White     | 1995<br>Recapture |
| 603 | 1997 | 505 | female | spawner  | 0958, 0959 | Orange    |                   |
| 604 | 1997 | 506 | female | spawner  | 673        | Orange    |                   |
| 605 | 1997 | 507 | female | spawner  | 169        | White     | 1995<br>Recapture |
| 606 | 1997 | 509 | female | spawner  | 78         | White     | 1995<br>Recapture |
| 607 | 1997 | 509 | female | spawner  | 78         | White     | 1995<br>Recapture |
| 608 | 1997 | 510 | female | spawner  | 164        | White     | 1995<br>Recapture |
| 609 | 1997 | 510 | female | spawner  | 658        | Orange    |                   |
| 610 | 1997 | 510 | female | spawner  | 0871, 0872 | Orange    |                   |
| 611 | 1997 | 513 | female | spawner  | 616        | Orange    |                   |
| 612 | 1997 | 515 | female | spawner  | 547        | Orange    |                   |
| 613 | 1997 | 515 | female | spawner  | 609        | Orange    |                   |
| 614 | 1997 | 516 | female | spawner  | 605        | Orange    |                   |
| 615 | 1997 | 518 | female | spawner  | 666        | Orange    |                   |
| 616 | 1997 | 518 | female | spawner  | 0786, 0787 | Orange    |                   |
| 617 | 1997 | 520 | female | spawner  | 314        | White     | 1995<br>Recapture |
| 618 | 1997 | 522 | female | spawner  | 652        | Orange    |                   |
| 619 | 1997 | 523 | female | spawner  | 347        | White     | 1995<br>Recapture |
| 620 | 1997 | 523 | female | spawner  | 509        | Orange    |                   |
| 621 | 1997 | 523 | female | spawner  | 0865, 0866 | Orange    |                   |
| 622 | 1997 | 525 | female | spawner  | 574        | Orange    |                   |
| 623 | 1997 | 525 | female | spawner  | 583        | Orange    |                   |
| 624 | 1997 | 535 | female | spawner  | 3          | White     | 1995<br>Recapture |
| 625 | 1997 | 538 | female | spawner  | 600        | Orange    |                   |
| 626 | 1997 | 538 | female | spawner  | 910        | Orange    |                   |
| 627 | 1997 | 540 | female | spawner  | 543        | Orange    |                   |
| 628 | 1997 | 545 | female | spawner  | 627        | Orange    |                   |
| 629 | 1997 | 548 | female | spawner  | 685        | Orange    |                   |

|     | Year | Lth | Sex    | Maturity | Tag No     | Tag Color | Notes |
|-----|------|-----|--------|----------|------------|-----------|-------|
| 630 | 1997 | 548 | female | spawner  | 887        | Orange    |       |
| 631 | 1997 | 550 | female | spawner  | 542        | Orange    |       |
| 632 | 1997 | 552 | female | spawner  | 653        | Orange    |       |
| 633 | 1997 | 553 | female | spawner  | 613        | Orange    |       |
| 634 | 1997 | 565 | female | spawner  | 769        | Orange    |       |
| 635 | 1997 | 568 | female | spawner  | 922        | Orange    |       |
| 636 | 1997 | 570 | female | spawner  | 639        | Orange    |       |
| 637 | 1997 | 586 | female | spawner  | 633        | Orange    |       |
| 638 | 1997 | 598 | female | spawner  | 914        | Orange    |       |
| 639 | 1997 | 612 | female | spawner  | 553        | Orange    |       |
| 640 | 1997 |     | female | spawner  | 751        | Orange    |       |
| 641 | 1997 |     | female | spawner  | 752        | Orange    |       |
| 642 | 1997 |     | female | spawner  | 753        | Orange    |       |
| 643 | 1997 |     | female | spawner  | 755        | Orange    |       |
| 644 | 1997 |     | female | spawner  | 756        | Orange    |       |
| 645 | 1997 |     | female | spawner  | 757        | Orange    |       |
| 646 | 1997 |     | female | spawner  | 758        | Orange    |       |
| 647 | 1997 |     | female | spawner  | 1033, 1034 | Orange    |       |
| 648 | 1997 |     | female | spawner  | 1052       | Orange    |       |
| 649 | 1997 |     | female | spawner  | 1053       | Orange    |       |
| 650 | 1997 |     | female | spawner  | 1054       | Orange    |       |
| 651 | 1997 |     | female | spawner  | 1056       | Orange    |       |
| 652 | 1997 |     | female | spawner  | 1070       | Orange    |       |
| 653 | 1997 |     | female | spawner  | 1072       | Orange    |       |
| 654 | 1997 |     | female | spawner  | 1078       | Orange    |       |
| 655 | 1997 |     | female | spawner  | 1079       | Orange    |       |
| 656 | 1997 |     | female | spawner  | 1080       | Orange    |       |
| 657 | 1997 |     | female | spawner  | 1081       | Orange    |       |
| 658 | 1997 |     | female | spawner  | 1085       | Orange    |       |
| 659 | 1997 |     | female | spawner  | 1089       | Orange    |       |
| 660 | 1997 |     | female | spawner  | 1091       | Orange    |       |
| 661 | 1997 |     | female | spawner  | 1092       | Orange    |       |
| 662 | 1997 |     | female | spawner  | 1093       | Orange    |       |
| 663 | 1997 |     | female | spawner  | 1096       | Orange    |       |
| 664 | 1997 |     | female | spawner  | 1099       | Orange    |       |
| 665 | 1997 |     | female | spawner  | 1100       | Orange    |       |
| 666 | 1997 | 375 | male   | spawner  | 622        | Orange    |       |
| 667 | 1997 | 383 | male   | spawner  | 944        | Orange    |       |
| 668 | 1997 | 395 | male   | spawner  | 563        | Orange    |       |
| 669 | 1997 | 397 | male   | spawner  | 644        | Orange    |       |
| 670 | 1997 | 407 | male   | spawner  | 0805, 0806 | Orange    |       |
| 671 | 1997 | 413 | male   | spawner  | 0811, 0812 | Orange    |       |
| 672 | 1997 | 415 | male   | spawner  | 624        | Orange    |       |
| 673 | 1997 | 419 | male   | spawner  | 693        | Orange    |       |
| 674 | 1997 | 421 | male   | spawner  | 660        | Orange    |       |
| 675 | 1997 | 422 | male   | spawner  | 902        | Orange    |       |
| 676 | 1997 | 427 | male   | spawner  | 612        | Orange    |       |
| 677 | 1997 | 430 | male   | spawner  | 524        | Orange    |       |
| 678 | 1997 | 430 | male   | spawner  | 879        | Orange    |       |

|     | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b>      |
|-----|-------------|------------|------------|-----------------|---------------|------------------|-------------------|
| 679 | 1997        | 440        | male       | spawner         | 637           | Orange           |                   |
| 680 | 1997        | 445        | male       | spawner         | 617           | Orange           |                   |
| 681 | 1997        | 445        | male       | spawner         | 664           | Orange           |                   |
| 682 | 1997        | 447        | male       | spawner         | 918           | Orange           |                   |
| 683 | 1997        | 450        | male       | spawner         | 552           | Orange           |                   |
| 684 | 1997        | 450        | male       | spawner         | 727           | Orange           |                   |
| 685 | 1997        | 453        | male       | spawner         | 933           | Orange           |                   |
| 686 | 1997        | 455        | male       | spawner         | 626           | Orange           |                   |
| 687 | 1997        | 455        | male       | spawner         | 638           | Orange           |                   |
| 688 | 1997        | 460        | male       | spawner         | 730           | Orange           |                   |
| 689 | 1997        | 460        | male       | spawner         | 739           | Orange           |                   |
| 690 | 1997        | 463        | male       | spawner         | 614           | Orange           |                   |
| 691 | 1997        | 463        | male       | spawner         | 736           | Orange           |                   |
| 692 | 1997        | 466        | male       | spawner         | 916           | Orange           |                   |
| 693 | 1997        | 475        | male       | spawner         | 611           | Orange           |                   |
| 694 | 1997        | 480        | male       | spawner         | 630           | Orange           |                   |
| 695 | 1997        | 484        | male       | spawner         | 651           | Orange           |                   |
| 696 | 1997        | 484        | male       | spawner         | 1040, 1041    | Orange           |                   |
| 697 | 1997        | 488        | male       | spawner         | 623           | Orange           |                   |
| 698 | 1997        | 502        | male       | spawner         | 1010          | Orange           |                   |
| 699 | 1997        | 505        | male       | spawner         | 525           | Orange           |                   |
| 700 | 1997        | 509        | male       | spawner         | 252           | White            | 1995<br>Recapture |
| 701 | 1997        | 522        | male       | spawner         | 347           | White            | 1995<br>Recapture |
| 702 | 1997        | 535        | male       | spawner         | 997           | Orange           |                   |
| 703 | 1997        | 538        | male       | spawner         | 684           | Orange           |                   |
| 704 | 1997        | 545        | male       | spawner         | 170           | White            | 1995<br>Recapture |
| 705 | 1997        | 555        | male       | spawner         | 646           | Orange           |                   |
| 706 | 1997        | 560        | male       | spawner         | 514           | Orange           |                   |
| 707 | 1997        | 580        | male       | spawner         | 931           | Orange           |                   |
| 708 | 1997        | 636        | male       | spawner         | 661           | Orange           |                   |
| 709 | 1997        |            | male       | spawner         | 754           | Orange           |                   |
| 710 | 1997        |            | male       | spawner         | 1076          | Orange           |                   |
| 711 | 1997        |            | male       | spawner         | 1084          | Orange           |                   |
| 712 | 1997        | 331        |            | silver          | 0844, 0845    | Orange           |                   |
| 713 | 1997        | 340        |            | silver          | 949           | Orange           |                   |
| 714 | 1997        | 355        |            | silver          | 1003          | Orange           |                   |
| 715 | 1997        | 363        |            | silver          | 897           | Orange           |                   |
| 716 | 1997        | 365        |            | silver          | 731           | Orange           |                   |
| 717 | 1997        | 365        |            | silver          | 747           | Orange           |                   |
| 718 | 1997        | 365        |            | silver          | 936           | Orange           |                   |
| 719 | 1997        | 387        |            | silver          | 876           | Orange           |                   |
| 720 | 1997        | 389        |            | silver          | 920           | Orange           |                   |
| 721 | 1997        | 395        |            | silver          | 718           | Orange           |                   |
| 722 | 1997        | 396        |            | silver          | 0850, 0827    | Orange           |                   |
| 723 | 1997        | 400        |            | silver          | 947           | Orange           |                   |
| 724 | 1997        | 400        |            | silver          | 0960, 0961    | Orange           |                   |
| 725 | 1997        | 403        |            | silver          | 1046, 1048    | Orange           |                   |

|     | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|-----|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 726 | 1997        | 405        |            | silver          | 511           | Orange           |              |
| 727 | 1997        | 405        |            | silver          | 0974, 0975    | Orange           |              |
| 728 | 1997        | 405        |            | silver          | 0978, 0979    | Orange           |              |
| 729 | 1997        | 406        |            | silver          | 894           | Orange           |              |
| 730 | 1997        | 407        |            | silver          | 0813, 0814    | Orange           |              |
| 731 | 1997        | 407        |            | silver          | 0834, 0835    | Orange           |              |
| 732 | 1997        | 408        |            | silver          | 1042, 1043    | Orange           |              |
| 733 | 1997        | 409        |            | silver          | 670           | Orange           |              |
| 734 | 1997        | 410        |            | silver          | 570           | Orange           |              |
| 735 | 1997        | 410        |            | silver          | 700           | Orange           |              |
| 736 | 1997        | 410        |            | silver          | 745           | Orange           |              |
| 737 | 1997        | 410        |            | silver          | 0826, 0828    | Orange           |              |
| 738 | 1997        | 410        |            | silver          | 0982, 0984    | Orange           |              |
| 739 | 1997        | 411        |            | silver          | 0832, 0833    | Orange           |              |
| 740 | 1997        | 412        |            | silver          | 896           | Orange           |              |
| 741 | 1997        | 412        |            | silver          | 0987, 0988    | Orange           |              |
| 742 | 1997        | 413        |            | silver          | 667           | Orange           |              |
| 743 | 1997        | 413        |            | silver          | 885           | Orange           |              |
| 744 | 1997        | 414        |            | silver          | 566           | Orange           |              |
| 745 | 1997        | 414        |            | silver          | 0842, 0843    | Orange           |              |
| 746 | 1997        | 414        |            | silver          | 917           | Orange           |              |
| 747 | 1997        | 415        |            | silver          | 502           | Orange           |              |
| 748 | 1997        | 415        |            | silver          | 643           | Orange           |              |
| 749 | 1997        | 415        |            | silver          | 735           | Orange           |              |
| 750 | 1997        | 415        |            | silver          | 925           | Orange           |              |
| 751 | 1997        | 415        |            | silver          | 0966, 0965    | Orange           |              |
| 752 | 1997        | 415        |            | silver          | 0992, 0993    | Orange           |              |
| 753 | 1997        | 416        |            | silver          | 550           | Orange           |              |
| 754 | 1997        | 416        |            | silver          | 655           | Orange           |              |
| 755 | 1997        | 416        |            | silver          | 763           | Orange           |              |
| 756 | 1997        | 417        |            | silver          | 517           | Orange           |              |
| 757 | 1997        | 418        |            | silver          | 544           | Orange           |              |
| 758 | 1997        | 418        |            | silver          | 596           | Orange           |              |
| 759 | 1997        | 418        |            | silver          | 665           | Orange           |              |
| 760 | 1997        | 418        |            | silver          | 691           | Orange           |              |
| 761 | 1997        | 418        |            | silver          | 710           | Orange           |              |
| 762 | 1997        | 418        |            | silver          | 760           | Orange           |              |
| 763 | 1997        | 418        |            | silver          | 924           | Orange           |              |
| 764 | 1997        | 420        |            | silver          | 531           | Orange           |              |
| 765 | 1997        | 420        |            | silver          | 726           | Orange           |              |
| 766 | 1997        | 420        |            | silver          | 0809, 0810    | Orange           |              |
| 767 | 1997        | 420        |            | silver          | 898           | Orange           |              |
| 768 | 1997        | 420        |            | silver          | 0963, 0964    | Orange           |              |
| 769 | 1997        | 420        |            | silver          | 0990, 0991    | Orange           |              |
| 770 | 1997        | 421        |            | silver          | 579           | Orange           |              |
| 771 | 1997        | 421        |            | silver          | 0840, 0841    | Orange           |              |
| 772 | 1997        | 422        |            | silver          | 546           | Orange           |              |
| 773 | 1997        | 422        |            | silver          | 582           | Orange           |              |
| 774 | 1997        | 422        |            | silver          | 688           | Orange           |              |

|     | Year | Lth | Sex | Maturity | Tag No     | Tag Color | Notes |
|-----|------|-----|-----|----------|------------|-----------|-------|
| 775 | 1997 | 422 |     | silver   | 689        | Orange    |       |
| 776 | 1997 | 422 |     | silver   | 696        | Orange    |       |
| 777 | 1997 | 423 |     | silver   | 759        | Orange    |       |
| 778 | 1997 | 423 |     | silver   | 930        | Orange    |       |
| 779 | 1997 | 423 |     | silver   | 1036, 1037 | Orange    |       |
| 780 | 1997 | 424 |     | silver   | 0778, 0779 | Orange    |       |
| 781 | 1997 | 424 |     | silver   | 938        | Orange    |       |
| 782 | 1997 | 424 |     | silver   | 1014, 1015 | Orange    |       |
| 783 | 1997 | 425 |     | silver   | 560        | Orange    |       |
| 784 | 1997 | 425 |     | silver   | 723        | Orange    |       |
| 785 | 1997 | 425 |     | silver   | 733        | Orange    |       |
| 786 | 1997 | 425 |     | silver   | 901        | Orange    |       |
| 787 | 1997 | 425 |     | silver   | 951        | Orange    |       |
| 788 | 1997 | 425 |     | silver   | 0956, 0957 | Orange    |       |
| 789 | 1997 | 425 |     | silver   | 0971, 0969 | Orange    |       |
| 790 | 1997 | 426 |     | silver   | 687        | Orange    |       |
| 791 | 1997 | 426 |     | silver   | 698        | Orange    |       |
| 792 | 1997 | 426 |     | silver   | 919        | Orange    |       |
| 793 | 1997 | 426 |     | silver   | 923        | Orange    |       |
| 794 | 1997 | 426 |     | silver   | 926        | Orange    |       |
| 795 | 1997 | 427 |     | silver   | 708        | Orange    |       |
| 796 | 1997 | 427 |     | silver   | 713        | Orange    |       |
| 797 | 1997 | 427 |     | silver   | 0867, 0868 | Orange    |       |
| 798 | 1997 | 427 |     | silver   | 908        | Orange    |       |
| 799 | 1997 | 427 |     | silver   | 921        | Orange    |       |
| 800 | 1997 | 428 |     | silver   | 572        | Orange    |       |
| 801 | 1997 | 428 |     | silver   | 599        | Orange    |       |
| 802 | 1997 | 428 |     | silver   | 668        | Orange    |       |
| 803 | 1997 | 428 |     | silver   | 681        | Orange    |       |
| 804 | 1997 | 428 |     | silver   | 722        | Orange    |       |
| 805 | 1997 | 428 |     | silver   | 909        | Orange    |       |
| 806 | 1997 | 428 |     | silver   | 915        | Orange    |       |
| 807 | 1997 | 429 |     | silver   | 0815, 0816 | Orange    |       |
| 808 | 1997 | 429 |     | silver   | 892        | Orange    |       |
| 809 | 1997 | 430 |     | silver   | 501        | Orange    |       |
| 810 | 1997 | 430 |     | silver   | 504        | Orange    |       |
| 811 | 1997 | 430 |     | silver   | 513        | Orange    |       |
| 812 | 1997 | 430 |     | silver   | 527        | Orange    |       |
| 813 | 1997 | 430 |     | silver   | 577        | Orange    |       |
| 814 | 1997 | 430 |     | silver   | 578        | Orange    |       |
| 815 | 1997 | 430 |     | silver   | 724        | Orange    |       |
| 816 | 1997 | 430 |     | silver   | 888        | Orange    |       |
| 817 | 1997 | 430 |     | silver   | 911        | Orange    |       |
| 818 | 1997 | 430 |     | silver   | 950        | Orange    |       |
| 819 | 1997 | 430 |     | silver   | 952        | Orange    |       |
| 820 | 1997 | 430 |     | silver   | 0985, 0986 | Orange    |       |
| 821 | 1997 | 431 |     | silver   | 717        | Orange    |       |
| 822 | 1997 | 432 |     | silver   | 929        | Orange    |       |
| 823 | 1997 | 433 |     | silver   | 608        | Orange    |       |

|     | Year | Lth | Sex | Maturity | Tag No     | Tag Color | Notes |
|-----|------|-----|-----|----------|------------|-----------|-------|
| 824 | 1997 | 433 |     | silver   | 703        | Orange    |       |
| 825 | 1997 | 434 |     | silver   | 571        | Orange    |       |
| 826 | 1997 | 434 |     | silver   | 686        | Orange    |       |
| 827 | 1997 | 435 |     | silver   | 679        | Orange    |       |
| 828 | 1997 | 435 |     | silver   | 719        | Orange    |       |
| 829 | 1997 | 435 |     | silver   | 0780, 0781 | Orange    |       |
| 830 | 1997 | 435 |     | silver   | 895        | Orange    |       |
| 831 | 1997 | 435 |     | silver   | 0976, 0977 | Orange    |       |
| 832 | 1997 | 436 |     | silver   | 555        | Orange    |       |
| 833 | 1997 | 436 |     | silver   | 595        | Orange    |       |
| 834 | 1997 | 436 |     | silver   | 1024, 1025 | Orange    |       |
| 835 | 1997 | 436 |     | silver   | 1038, 1039 | Orange    |       |
| 836 | 1997 | 437 |     | silver   | 516        | Orange    |       |
| 837 | 1997 | 437 |     | silver   | 575        | Orange    |       |
| 838 | 1997 | 437 |     | silver   | 0784, 0785 | Orange    |       |
| 839 | 1997 | 438 |     | silver   | 594        | Orange    |       |
| 840 | 1997 | 438 |     | silver   | 677        | Orange    |       |
| 841 | 1997 | 438 |     | silver   | 725        | Orange    |       |
| 842 | 1997 | 438 |     | silver   | 886        | Orange    |       |
| 843 | 1997 | 438 |     | silver   | 890        | Orange    |       |
| 844 | 1997 | 439 |     | silver   | 530        | Orange    |       |
| 845 | 1997 | 439 |     | silver   | 620        | Orange    |       |
| 846 | 1997 | 439 |     | silver   | 659        | Orange    |       |
| 847 | 1997 | 439 |     | silver   | 948        | Orange    |       |
| 848 | 1997 | 440 |     | silver   | 532        | Orange    |       |
| 849 | 1997 | 440 |     | silver   | 702        | Orange    |       |
| 850 | 1997 | 440 |     | silver   | 1017, 1018 | Orange    |       |
| 851 | 1997 | 442 |     | silver   | 0869, 0870 | Orange    |       |
| 852 | 1997 | 442 |     | silver   | 1019, 1020 | Orange    |       |
| 853 | 1997 | 443 |     | silver   | 692        | Orange    |       |
| 854 | 1997 | 444 |     | silver   | 0863, 0864 | Orange    |       |
| 855 | 1997 | 444 |     | silver   | 884        | Orange    |       |
| 856 | 1997 | 444 |     | silver   | 945        | Orange    |       |
| 857 | 1997 | 444 |     | silver   | 1044, 1045 | Orange    |       |
| 858 | 1997 | 445 |     | silver   | 569        | Orange    |       |
| 859 | 1997 | 445 |     | silver   | 601        | Orange    |       |
| 860 | 1997 | 445 |     | silver   | 656        | Orange    |       |
| 861 | 1997 | 445 |     | silver   | 0772, 0775 | Orange    |       |
| 862 | 1997 | 445 |     | silver   | 0823, 0824 | Orange    |       |
| 863 | 1997 | 446 |     | silver   | 682        | Orange    |       |
| 864 | 1997 | 447 |     | silver   | 539        | Orange    |       |
| 865 | 1997 | 447 |     | silver   | 711        | Orange    |       |
| 866 | 1997 | 447 |     | silver   | 913        | Orange    |       |
| 867 | 1997 | 448 |     | silver   | 729        | Orange    |       |
| 868 | 1997 | 450 |     | silver   | 526        | Orange    |       |
| 869 | 1997 | 450 |     | silver   | 943        | Orange    |       |
| 870 | 1997 | 451 |     | silver   | 669        | Orange    |       |
| 871 | 1997 | 452 |     | silver   | 0777, 0776 | Orange    |       |
| 872 | 1997 | 452 |     | silver   | 0821, 0822 | Orange    |       |



|     | Year | Lth | Sex | Maturity | Tag No      | Tag Color | Notes             |
|-----|------|-----|-----|----------|-------------|-----------|-------------------|
| 873 | 1997 | 453 |     | silver   | 586         | Orange    |                   |
| 874 | 1997 | 455 |     | silver   | 672         | Orange    |                   |
| 875 | 1997 | 455 |     | silver   | 701         | Orange    |                   |
| 876 | 1997 | 455 |     | silver   | 891         | Orange    |                   |
| 877 | 1997 | 455 |     | silver   | 1002        | Orange    |                   |
| 878 | 1997 | 457 |     | silver   | 939         | Orange    |                   |
| 879 | 1997 | 458 |     | silver   | 0765 , 0766 | Orange    |                   |
| 880 | 1997 | 458 |     | silver   | 900         | Orange    |                   |
| 881 | 1997 | 458 |     | silver   | 912         | Orange    |                   |
| 882 | 1997 | 459 |     | silver   | 935         | Orange    |                   |
| 883 | 1997 | 459 |     | silver   | 983         | Orange    |                   |
| 884 | 1997 | 460 |     | silver   | 580         | Orange    |                   |
| 885 | 1997 | 460 |     | silver   | 0770, 0771  | Orange    |                   |
| 886 | 1997 | 460 |     | silver   | 899         | Orange    |                   |
| 887 | 1997 | 462 |     | silver   | 695         | Orange    |                   |
| 888 | 1997 | 465 |     | silver   | 906         | Orange    |                   |
| 889 | 1997 | 467 |     | silver   | 522         | Orange    |                   |
| 890 | 1997 | 467 |     | silver   | 1008, 1009  | Orange    |                   |
| 891 | 1997 | 468 |     | silver   | 551         | Orange    |                   |
| 892 | 1997 | 472 |     | silver   | 573         | Orange    |                   |
| 893 | 1997 | 474 |     | silver   | 0767, 0768  | Orange    |                   |
| 894 | 1997 | 476 |     | silver   | 675         | Orange    |                   |
| 895 | 1997 | 480 |     | silver   | 0980, 0981  | Orange    |                   |
| 896 | 1997 | 481 |     | silver   | 671         | Orange    |                   |
| 897 | 1997 | 482 |     | silver   | 0782, 0783  | Orange    |                   |
| 898 | 1997 | 483 |     | silver   | 889         | Orange    |                   |
| 899 | 1997 | 485 |     | silver   | 558         | Orange    |                   |
| 900 | 1997 | 487 |     | silver   | 932         | Orange    |                   |
| 901 | 1997 | 490 |     | silver   | 0999, 1000  | Orange    |                   |
| 902 | 1997 | 492 |     | silver   | 541         | Orange    |                   |
| 903 | 1997 | 492 |     | silver   | 597         | Orange    |                   |
| 904 | 1997 | 503 |     | silver   | 650         | Orange    |                   |
| 905 | 1997 | 505 |     | silver   | 278         | White     | 1995<br>Recapture |
| 906 | 1997 | 506 |     | silver   | 534         | Orange    |                   |
| 907 | 1997 | 510 |     | silver   | 523         | Orange    |                   |
| 908 | 1997 | 513 |     | silver   | 942         | Orange    |                   |
| 909 | 1997 | 518 |     | silver   | 554         | Orange    |                   |
| 910 | 1997 | 520 |     | silver   | 883         | Orange    |                   |
| 911 | 1997 | 525 |     | silver   | 244         | White     | 1995<br>Recapture |
| 912 | 1997 | 528 |     | silver   | 568         | Orange    |                   |
| 913 | 1997 | 542 |     | silver   | 506         | Orange    |                   |
| 914 | 1997 | 545 |     | silver   | 519         | Orange    |                   |
| 915 | 1997 | 549 |     | silver   | 338         | White     | 1995<br>Recapture |
| 916 | 1997 | 590 |     | silver   | 528         | Orange    |                   |
| 917 | 1997 | 604 |     | silver   | 0859, 0860  | Orange    |                   |
| 918 | 1997 | 690 |     | silver   | 680         | Orange    |                   |
| 919 | 1997 |     |     | silver   | 1051        | Orange    |                   |

|     | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|-----|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 920 | 1997        |            |            | silver          | 1055          | Orange           |              |
| 921 | 1997        |            |            | silver          | 1071          | Orange           |              |
| 922 | 1997        |            |            | silver          | 1073          | Orange           |              |
| 923 | 1997        |            |            | silver          | 1086          | Orange           |              |
| 924 | 1997        |            |            | silver          | 1094          | Orange           |              |
| 925 | 1997        |            |            | silver          | 1098          | Orange           |              |
| 926 | 2001        | 390        | female     | spawner         | 362           | Pink             |              |
| 927 | 2001        | 400        | female     | spawner         | 39            | Pink             |              |
| 928 | 2001        | 400        | female     | spawner         | 318           | Pink             |              |
| 929 | 2001        | 410        | female     | spawner         | 24            | Pink             |              |
| 930 | 2001        | 410        | female     | spawner         | 146           | Pink             |              |
| 931 | 2001        | 410        | female     | spawner         | 234           | Pink             |              |
| 932 | 2001        | 410        | female     | spawner         | 381           | Pink             |              |
| 933 | 2001        | 420        | female     | spawner         | 44            | Pink             |              |
| 934 | 2001        | 420        | female     | spawner         | 166           | Pink             |              |
| 935 | 2001        | 430        | female     | spawner         | 16            | Pink             |              |
| 936 | 2001        | 430        | female     | spawner         | 67            | Pink             |              |
| 937 | 2001        | 430        | female     | spawner         | 123           | Pink             |              |
| 938 | 2001        | 430        | female     | spawner         | 145           | Pink             |              |
| 939 | 2001        | 430        | female     | spawner         | 162           | Pink             |              |
| 940 | 2001        | 430        | female     | spawner         | 177           | Pink             |              |
| 941 | 2001        | 430        | female     | spawner         | 259           | Pink             |              |
| 942 | 2001        | 430        | female     | spawner         | 273           | Pink             |              |
| 943 | 2001        | 430        | female     | spawner         | 308           | Pink             |              |
| 944 | 2001        | 430        | female     | spawner         | 313           | Pink             |              |
| 945 | 2001        | 430        | female     | spawner         | 377           | Pink             |              |
| 946 | 2001        | 430        | female     | spawner         | 393           | Pink             |              |
| 947 | 2001        | 440        | female     | spawner         | 8             | Pink             |              |
| 948 | 2001        | 440        | female     | spawner         | 18            | Pink             |              |
| 949 | 2001        | 440        | female     | spawner         | 66            | Pink             |              |
| 950 | 2001        | 440        | female     | spawner         | 112           | Pink             |              |
| 951 | 2001        | 440        | female     | spawner         | 130           | Pink             |              |
| 952 | 2001        | 440        | female     | spawner         | 142           | Pink             |              |
| 953 | 2001        | 440        | female     | spawner         | 187           | Pink             |              |
| 954 | 2001        | 440        | female     | spawner         | 209           | Pink             |              |
| 955 | 2001        | 440        | female     | spawner         | 246           | Pink             |              |
| 956 | 2001        | 440        | female     | spawner         | 254           | Pink             |              |
| 957 | 2001        | 440        | female     | spawner         | 322           | Pink             |              |
| 958 | 2001        | 440        | female     | spawner         | 326           | Pink             |              |
| 959 | 2001        | 440        | female     | spawner         | 346           | Pink             |              |
| 960 | 2001        | 440        | female     | spawner         | 382           | Pink             |              |
| 961 | 2001        | 440        | female     | spawner         | 389           | Pink             |              |
| 962 | 2001        | 450        | female     | spawner         | 7             | Pink             |              |
| 963 | 2001        | 450        | female     | spawner         | 10            | Pink             |              |
| 964 | 2001        | 450        | female     | spawner         | 45            | Pink             |              |
| 965 | 2001        | 450        | female     | spawner         | 69            | Pink             |              |
| 966 | 2001        | 450        | female     | spawner         | 133           | Pink             |              |
| 967 | 2001        | 450        | female     | spawner         | 148           | Pink             |              |
| 968 | 2001        | 450        | female     | spawner         | 248           | Pink             |              |

|      | Year | Lth | Sex    | Maturity | Tag No  | Tag Color | Notes                                    |
|------|------|-----|--------|----------|---------|-----------|--|
| 969  | 2001 | 450 | female | spawner  | 288     | Pink      |  |
| 970  | 2001 | 450 | female | spawner  | 307     | Pink      |  |
| 971  | 2001 | 450 | female | spawner  | 358     | Pink      |  |
| 972  | 2001 | 450 | female | spawner  | 398     | Pink      |  |
| 973  | 2001 | 450 | female | spawner  | 429     | Pink      |  |
| 974  | 2001 | 450 | female | spawner  | 370/371 | Pink      |  |
| 975  | 2001 | 460 | female | spawner  | 89      | Pink      |  |
| 976  | 2001 | 460 | female | spawner  | 109     | Pink      |  |
| 977  | 2001 | 460 | female | spawner  | 164     | Pink      |  |
| 978  | 2001 | 460 | female | spawner  | 208     | Pink      |  |
| 979  | 2001 | 460 | female | spawner  | 233     | Pink      |  |
| 980  | 2001 | 460 | female | spawner  | 243     | Pink      | FRESH<br>BITE<br>MARKS<br>FRESH<br>WOUND |
| 981  | 2001 | 460 | female | spawner  | 416     | Pink      |  |
| 982  | 2001 | 460 | female | spawner  | 417     | Pink      |  |
| 983  | 2001 | 470 | female | spawner  | 37      | Pink      |  |
| 984  | 2001 | 470 | female | spawner  | 95      | Pink      |  |
| 985  | 2001 | 470 | female | spawner  | 136     | Pink      |  |
| 986  | 2001 | 470 | female | spawner  | 195     | Pink      |  |
| 987  | 2001 | 470 | female | spawner  | 211     | Pink      |  |
| 988  | 2001 | 470 | female | spawner  | 212     | Pink      |  |
| 989  | 2001 | 470 | female | spawner  | 324     | Pink      |  |
| 990  | 2001 | 470 | female | spawner  | 325     | Pink      |  |
| 991  | 2001 | 470 | female | spawner  | 349     | Pink      |  |
| 992  | 2001 | 470 | female | spawner  | 356     | Pink      |  |
| 993  | 2001 | 480 | female | spawner  | 12      | Pink      |  |
| 994  | 2001 | 480 | female | spawner  | 225     | Pink      |  |
| 995  | 2001 | 480 | female | spawner  | 269     | Pink      |  |
| 996  | 2001 | 480 | female | spawner  | 284     | Pink      |  |
| 997  | 2001 | 480 | female | spawner  | 312     | Pink      |  |
| 998  | 2001 | 480 | female | spawner  | 315     | Pink      |  |
| 999  | 2001 | 480 | female | spawner  | 321     | Pink      |  |
| 1000 | 2001 | 480 | female | spawner  | 384     | Pink      |  |
| 1001 | 2001 | 480 | female | spawner  | 415     | Pink      |  |
| 1002 | 2001 | 490 | female | spawner  | 144     | Pink      |  |
| 1003 | 2001 | 490 | female | spawner  | 206     | Pink      |  |
| 1004 | 2001 | 490 | female | spawner  | 241     | Pink      |  |
| 1005 | 2001 | 490 | female | spawner  | 277     | Pink      |  |
| 1006 | 2001 | 490 | female | spawner  | 361     | Pink      |  |
| 1007 | 2001 | 490 | female | spawner  | 374     | Pink      |  |
| 1008 | 2001 | 490 | female | spawner  | 425     | Pink      |  |
| 1009 | 2001 | 500 | female | spawner  | 17      | Pink      |  |
| 1010 | 2001 | 500 | female | spawner  | 20      | Pink      |  |
| 1011 | 2001 | 500 | female | spawner  | 35      | Pink      |  |
| 1012 | 2001 | 500 | female | spawner  | 169     | Pink      |  |
| 1013 | 2001 | 500 | female | spawner  | 217     | Pink      |  |
| 1014 | 2001 | 500 | female | spawner  | 258     | Pink      |  |
| 1015 | 2001 | 500 | female | spawner  | 396     | Pink      |  |

|      | Year | Lth | Sex    | Maturity | Tag No | Tag Color | Notes                  |
|------|------|-----|--------|----------|--------|-----------|------------------------|
| 1016 | 2001 | 500 | female | spawner  | 402    | Pink      |                        |
| 1017 | 2001 | 500 | female | spawner  | 426    | Pink      |                        |
| 1018 | 2001 | 510 | female | spawner  | 11     | Pink      |                        |
| 1019 | 2001 | 510 | female | spawner  | 36     | Pink      |                        |
| 1020 | 2001 | 510 | female | spawner  | 57     | Pink      |                        |
| 1021 | 2001 | 510 | female | spawner  | 106    | Pink      |                        |
| 1022 | 2001 | 510 | female | spawner  | 122    | Pink      |                        |
| 1023 | 2001 | 510 | female | spawner  | 127    | Pink      |                        |
| 1024 | 2001 | 510 | female | spawner  | 219    | Pink      |                        |
| 1025 | 2001 | 510 | female | spawner  | 316    | Pink      |                        |
| 1026 | 2001 | 510 | female | spawner  | 354    | Pink      |                        |
| 1027 | 2001 | 510 | female | spawner  | 388    | Pink      |                        |
| 1028 | 2001 | 520 | female | spawner  | 22     | Pink      |                        |
| 1029 | 2001 | 520 | female | spawner  | 27     | Pink      |                        |
| 1030 | 2001 | 520 | female | spawner  | 40     | Pink      |                        |
| 1031 | 2001 | 520 | female | spawner  | 52     | Pink      |                        |
| 1032 | 2001 | 520 | female | spawner  | 77     | Pink      |                        |
| 1033 | 2001 | 520 | female | spawner  | 135    | Pink      |                        |
| 1034 | 2001 | 520 | female | spawner  | 188    | Pink      |                        |
| 1035 | 2001 | 520 | female | spawner  | 285    | Pink      |                        |
| 1036 | 2001 | 520 | female | spawner  | 301    | Pink      |                        |
| 1037 | 2001 | 520 | female | spawner  | 391    | Pink      |                        |
| 1038 | 2001 | 520 | female | spawner  | 433    | Pink      |                        |
| 1039 | 2001 | 520 | female | spawner  | 436    | Pink      |                        |
| 1040 | 2001 | 530 | female | spawner  | 111    | Pink      |                        |
|      |      |     |        |          |        |           | FRESH<br>BITE<br>MARKS |
| 1041 | 2001 | 530 | female | spawner  | 291    | Pink      |                        |
| 1042 | 2001 | 530 | female | spawner  | 306    | Pink      |                        |
| 1043 | 2001 | 530 | female | spawner  | 367    | Pink      |                        |
| 1044 | 2001 | 530 | female | spawner  | 390    | Pink      |                        |
| 1045 | 2001 | 530 | female | spawner  | 399    | Pink      |                        |
| 1046 | 2001 | 530 | female | spawner  | 414    | Pink      |                        |
| 1047 | 2001 | 530 | female | spawner  | 435    | Pink      |                        |
| 1048 | 2001 | 540 | female | spawner  | 13     | Pink      |                        |
| 1049 | 2001 | 540 | female | spawner  | 104    | Pink      |                        |
| 1050 | 2001 | 540 | female | spawner  | 247    | Pink      |                        |
| 1051 | 2001 | 540 | female | spawner  | 268    | Pink      |                        |
| 1052 | 2001 | 540 | female | spawner  | 309    | Pink      |                        |
| 1053 | 2001 | 540 | female | spawner  | 342    | Pink      |                        |
| 1054 | 2001 | 540 | female | spawner  | 378    | Pink      |                        |
| 1055 | 2001 | 540 | female | spawner  | 394    | Pink      |                        |
| 1056 | 2001 | 540 | female | spawner  | 395    | Pink      |                        |
| 1057 | 2001 | 540 | female | spawner  | 430    | Pink      |                        |
|      |      |     |        |          |        |           | FRESH<br>BITE<br>WOUND |
| 1058 | 2001 | 540 | female | spawner  |        |           |                        |
| 1059 | 2001 | 550 | female | spawner  | 26     | Pink      |                        |
| 1060 | 2001 | 550 | female | spawner  | 230    | Pink      |                        |
| 1061 | 2001 | 550 | female | spawner  | 283    | Pink      |                        |

|      | Year | Lth | Sex    | Maturity | Tag No  | Tag Color | Notes  |
|------|------|-----|--------|----------|---------|-----------|--|
| 1062 | 2001 | 550 | female | spawner  | 353     | Pink      |  |
| 1063 | 2001 | 550 | female | spawner  | 400     | Pink      |  |
| 1064 | 2001 | 550 | female | spawner  | 423     | Pink      |  |
| 1065 | 2001 | 550 | female | spawner  | 432     | Pink      |  |
| 1066 | 2001 | 560 | female | spawner  | 201     | Pink      |  |
| 1067 | 2001 | 560 | female | spawner  | 305     | Pink      |  |
| 1068 | 2001 | 570 | female | spawner  | 38      | Pink      |  |
| 1069 | 2001 | 580 | female | spawner  | 41/42   | Pink      |  |
|      |      |     |        |          |         |           | RECAP<br>RR0030<br>WHITE -<br>tag<br>removed |
| 1070 | 2001 | 595 | female | spawner  | 401     | Pink      |  |
| 1071 | 2001 | 620 | female | spawner  | 290     | Pink      |  |
| 1072 | 2001 | 650 | female | spawner  | 50      | Pink      |  |
| 1073 | 2001 |     | female | spawner  | 264     | Pink      | ANGLED                                       |
| 1074 | 2001 |     | female | spawner  | 403     | Pink      | ANGLED                                       |
| 1075 | 2001 |     | female | spawner  | 405     | Pink      | ANGLED                                       |
| 1076 | 2001 |     | female | spawner  | 407     | Pink      | ANGLED                                       |
| 1077 | 2001 |     | female | spawner  | 408     | Pink      | ANGLED                                       |
| 1078 | 2001 |     | female | spawner  | 409     | Pink      | ANGLED                                       |
| 1079 | 2001 |     | female | spawner  | 410     | Pink      | ANGLED                                       |
| 1080 | 2001 | 440 | male   | spawner  | 70      | Pink      |  |
| 1081 | 2001 | 440 | male   | spawner  | 419     | Pink      |  |
| 1082 | 2001 | 450 | male   | spawner  | 368     | Pink      |  |
| 1083 | 2001 | 490 | male   | spawner  | 82      | Pink      |  |
| 1084 | 2001 | 490 | male   | spawner  | 113     | Pink      |  |
| 1085 | 2001 | 500 | male   | spawner  | 192     | Pink      |  |
| 1086 | 2001 | 520 | male   | spawner  | 376     | Pink      |  |
| 1087 | 2001 | 530 | male   | spawner  | 366     | Pink      |  |
| 1088 | 2001 | 540 | male   | spawner  | 76      | Pink      |  |
| 1089 | 2001 | 590 | male   | spawner  | 116     | Pink      |  |
| 1090 | 2001 | 600 | male   | spawner  | 183/184 | Pink      |  |
| 1091 | 2001 | 620 | male   | spawner  | 25      | Pink      |  |
| 1092 | 2001 | 670 | male   | spawner  | 267     | Pink      |  |
| 1093 | 2001 |     | male   | spawner  | 404     | Pink      | ANGLED                                       |
| 1094 | 2001 |     | male   | spawner  | 406     | Pink      | ANGLED                                       |
| 1095 | 2001 | 190 |        | silver   |         |           |  |
| 1096 | 2001 | 200 |        | silver   |         |           |  |
| 1097 | 2001 | 220 |        | silver   |         |           |  |
| 1098 | 2001 | 220 |        | silver   |         |           |  |
| 1099 | 2001 | 280 |        | silver   | 29      | Pink      |  |
| 1100 | 2001 | 320 |        | silver   | 28      | Pink      |  |
| 1101 | 2001 | 320 |        | silver   | 81      | Pink      |  |
| 1102 | 2001 | 320 |        | silver   | 86      | Pink      |  |
| 1103 | 2001 | 320 |        | silver   | 373     | Pink      |  |
| 1104 | 2001 | 330 |        | silver   | 97      | Pink      |  |
| 1105 | 2001 | 340 |        | silver   | 91      | Pink      |  |
| 1106 | 2001 | 350 |        | silver   | 6       | Pink      |  |
| 1107 | 2001 | 350 |        | silver   | 152     | Pink      |  |

|      | Year | Lth | Sex | Maturity | Tag No  | Tag Color | Notes |
|------|------|-----|-----|----------|---------|-----------|-------|
| 1108 | 2001 | 350 |     | silver   | 256     | Pink      |       |
| 1109 | 2001 | 360 |     | silver   | 62      | Pink      |       |
| 1110 | 2001 | 360 |     | silver   | 96      | Pink      |       |
| 1111 | 2001 | 360 |     | silver   | 143     | Pink      |       |
| 1112 | 2001 | 360 |     | silver   | 222     | Pink      |       |
| 1113 | 2001 | 360 |     | silver   | 252     | Pink      |       |
| 1114 | 2001 | 360 |     | silver   | 347     | Pink      |       |
| 1115 | 2001 | 360 |     | silver   | 427     | Pink      |       |
| 1116 | 2001 | 360 |     | silver   | 434     | Pink      |       |
| 1117 | 2001 | 370 |     | silver   | 140     | Pink      |       |
| 1118 | 2001 | 370 |     | silver   | 141     | Pink      |       |
| 1119 | 2001 | 370 |     | silver   | 274     | Pink      |       |
| 1120 | 2001 | 380 |     | silver   | 85      | Pink      |       |
| 1121 | 2001 | 380 |     | silver   | 114     | Pink      |       |
| 1122 | 2001 | 380 |     | silver   | 139     | Pink      |       |
| 1123 | 2001 | 380 |     | silver   | 216     | Pink      |       |
| 1124 | 2001 | 380 |     | silver   | 297     | Pink      |       |
| 1125 | 2001 | 380 |     | silver   | 420     | Pink      |       |
| 1126 | 2001 | 380 |     | silver   | 214/215 | Pink      |       |
| 1127 | 2001 | 390 |     | silver   | 3       | Pink      |       |
| 1128 | 2001 | 390 |     | silver   | 61      | Pink      |       |
| 1129 | 2001 | 390 |     | silver   | 93      | Pink      |       |
| 1130 | 2001 | 390 |     | silver   | 295     | Pink      |       |
| 1131 | 2001 | 400 |     | silver   | 279     | Pink      |       |
| 1132 | 2001 | 400 |     | silver   | 428     | Pink      |       |
| 1133 | 2001 | 410 |     | silver   | 200     | Pink      |       |
| 1134 | 2001 | 410 |     | silver   | 207     | Pink      |       |
| 1135 | 2001 | 410 |     | silver   | 294     | Pink      |       |
| 1136 | 2001 | 420 |     | silver   | 80      | Pink      |       |
| 1137 | 2001 | 430 |     | silver   | 19      | Pink      |       |
| 1138 | 2001 | 430 |     | silver   | 46      | Pink      |       |
| 1139 | 2001 | 430 |     | silver   | 53      | Pink      |       |
| 1140 | 2001 | 430 |     | silver   | 84      | Pink      |       |
| 1141 | 2001 | 430 |     | silver   | 98      | Pink      |       |
| 1142 | 2001 | 430 |     | silver   | 100     | Pink      |       |
| 1143 | 2001 | 430 |     | silver   | 121     | Pink      |       |
| 1144 | 2001 | 430 |     | silver   | 153     | Pink      |       |
| 1145 | 2001 | 430 |     | silver   | 205     | Pink      |       |
| 1146 | 2001 | 430 |     | silver   | 235     | Pink      |       |
| 1147 | 2001 | 430 |     | silver   | 260     | Pink      |       |
| 1148 | 2001 | 430 |     | silver   | 287     | Pink      |       |
| 1149 | 2001 | 430 |     | silver   | 332     | Pink      |       |
| 1150 | 2001 | 440 |     | silver   | 71      | Pink      |       |
| 1151 | 2001 | 440 |     | silver   | 101     | Pink      |       |
| 1152 | 2001 | 440 |     | silver   | 102     | Pink      |       |
| 1153 | 2001 | 440 |     | silver   | 119     | Pink      |       |
| 1154 | 2001 | 440 |     | silver   | 120     | Pink      |       |
| 1155 | 2001 | 440 |     | silver   | 125     | Pink      |       |
| 1156 | 2001 | 440 |     | silver   | 132     | Pink      |       |

|      | Year | Lth | Sex | Maturity | Tag No  | Tag Color | Notes |
|------|------|-----|-----|----------|---------|-----------|-------|
| 1157 | 2001 | 440 |     | silver   | 138     | Pink      |       |
| 1158 | 2001 | 440 |     | silver   | 150     | Pink      |       |
| 1159 | 2001 | 440 |     | silver   | 157     | Pink      |       |
| 1160 | 2001 | 440 |     | silver   | 170     | Pink      |       |
| 1161 | 2001 | 440 |     | silver   | 174     | Pink      |       |
| 1162 | 2001 | 440 |     | silver   | 189     | Pink      |       |
| 1163 | 2001 | 440 |     | silver   | 341     | Pink      |       |
| 1164 | 2001 | 440 |     | silver   | 345     | Pink      |       |
| 1165 | 2001 | 440 |     | silver   | 351     | Pink      |       |
| 1166 | 2001 | 440 |     | silver   | 424     | Pink      |       |
| 1167 | 2001 | 450 |     | silver   | 60      | Pink      |       |
| 1168 | 2001 | 450 |     | silver   | 72      | Pink      |       |
| 1169 | 2001 | 450 |     | silver   | 78      | Pink      |       |
| 1170 | 2001 | 450 |     | silver   | 87      | Pink      |       |
| 1171 | 2001 | 450 |     | silver   | 88      | Pink      |       |
| 1172 | 2001 | 450 |     | silver   | 90      | Pink      |       |
| 1173 | 2001 | 450 |     | silver   | 94      | Pink      |       |
| 1174 | 2001 | 450 |     | silver   | 128     | Pink      |       |
| 1175 | 2001 | 450 |     | silver   | 193     | Pink      |       |
| 1176 | 2001 | 450 |     | silver   | 194     | Pink      |       |
| 1177 | 2001 | 450 |     | silver   | 203     | Pink      |       |
| 1178 | 2001 | 450 |     | silver   | 213     | Pink      |       |
| 1179 | 2001 | 450 |     | silver   | 228     | Pink      |       |
| 1180 | 2001 | 450 |     | silver   | 238     | Pink      |       |
| 1181 | 2001 | 450 |     | silver   | 245     | Pink      |       |
| 1182 | 2001 | 450 |     | silver   | 263     | Pink      |       |
| 1183 | 2001 | 450 |     | silver   | 270     | Pink      |       |
| 1184 | 2001 | 450 |     | silver   | 289     | Pink      |       |
| 1185 | 2001 | 450 |     | silver   | 299     | Pink      |       |
| 1186 | 2001 | 450 |     | silver   | 320     | Pink      |       |
| 1187 | 2001 | 450 |     | silver   | 350     | Pink      |       |
| 1188 | 2001 | 450 |     | silver   | 363     | Pink      |       |
| 1189 | 2001 | 450 |     | silver   | 117/118 | Pink      |       |
| 1190 | 2001 | 460 |     | silver   | 4       | Pink      |       |
| 1191 | 2001 | 460 |     | silver   | 5       | Pink      |       |
| 1192 | 2001 | 460 |     | silver   | 23      | Pink      |       |
| 1193 | 2001 | 460 |     | silver   | 33      | Pink      |       |
| 1194 | 2001 | 460 |     | silver   | 54      | Pink      |       |
| 1195 | 2001 | 460 |     | silver   | 64      | Pink      |       |
| 1196 | 2001 | 460 |     | silver   | 79      | Pink      |       |
| 1197 | 2001 | 460 |     | silver   | 105     | Pink      |       |
| 1198 | 2001 | 460 |     | silver   | 107     | Pink      |       |
| 1199 | 2001 | 460 |     | silver   | 126     | Pink      |       |
| 1200 | 2001 | 460 |     | silver   | 129     | Pink      |       |
| 1201 | 2001 | 460 |     | silver   | 172     | Pink      |       |
| 1202 | 2001 | 460 |     | silver   | 175     | Pink      |       |
| 1203 | 2001 | 460 |     | silver   | 220     | Pink      |       |
| 1204 | 2001 | 460 |     | silver   | 226     | Pink      |       |
| 1205 | 2001 | 460 |     | silver   | 229     | Pink      |       |

|      | Year | Lth | Sex | Maturity | Tag No | Tag Color | Notes                       |
|------|------|-----|-----|----------|--------|-----------|-----------------------------|
| 1206 | 2001 | 460 |     | silver   | 236    | Pink      |                             |
| 1207 | 2001 | 460 |     | silver   | 239    | Pink      |                             |
| 1208 | 2001 | 460 |     | silver   | 242    | Pink      |                             |
| 1209 | 2001 | 460 |     | silver   | 302    | Pink      |                             |
| 1210 | 2001 | 460 |     | silver   | 355    | Pink      |                             |
| 1211 | 2001 | 460 |     | silver   | 359    | Pink      |                             |
| 1212 | 2001 | 460 |     | silver   | 360    | Pink      |                             |
| 1213 | 2001 | 460 |     | silver   | 421    | Pink      |                             |
| 1214 | 2001 | 470 |     | silver   | 2      | Pink      |                             |
| 1215 | 2001 | 470 |     | silver   | 48     | Pink      |                             |
| 1216 | 2001 | 470 |     | silver   | 73     | Pink      |                             |
| 1217 | 2001 | 470 |     | silver   | 75     | Pink      |                             |
| 1218 | 2001 | 470 |     | silver   | 149    | Pink      |                             |
| 1219 | 2001 | 470 |     | silver   | 156    | Pink      |                             |
| 1220 | 2001 | 470 |     | silver   | 168    | Pink      |                             |
| 1221 | 2001 | 470 |     | silver   | 178    | Pink      |                             |
| 1222 | 2001 | 470 |     | silver   | 191    | Pink      |                             |
| 1223 | 2001 | 470 |     | silver   | 231    | Pink      |                             |
| 1224 | 2001 | 470 |     | silver   | 261    | Pink      |                             |
| 1225 | 2001 | 470 |     | silver   | 262    | Pink      |                             |
| 1226 | 2001 | 470 |     | silver   | 292    | Pink      |                             |
| 1227 | 2001 | 470 |     | silver   | 300    | Pink      |                             |
| 1228 | 2001 | 470 |     | silver   | 304    | Pink      |                             |
| 1229 | 2001 | 470 |     | silver   | 357    | Pink      |                             |
| 1230 | 2001 | 470 |     | silver   | 369    | Pink      |                             |
| 1231 | 2001 | 470 |     | silver   | 397    | Pink      | GILLNET MARKS               |
| 1232 | 2001 | 470 |     | silver   | 431    | Pink      |                             |
| 1233 | 2001 | 470 |     | silver   |        |           | KILLED BY ANGLING - Tag 253 |
| 1234 | 2001 | 480 |     | silver   | 9      | Pink      |                             |
| 1235 | 2001 | 480 |     | silver   | 32     | Pink      |                             |
| 1236 | 2001 | 480 |     | silver   | 65     | Pink      |                             |
| 1237 | 2001 | 480 |     | silver   | 161    | Pink      |                             |
| 1238 | 2001 | 480 |     | silver   | 190    | Pink      |                             |
| 1239 | 2001 | 480 |     | silver   | 210    | Pink      |                             |
| 1240 | 2001 | 480 |     | silver   | 232    | Pink      |                             |
| 1241 | 2001 | 480 |     | silver   | 244    | Pink      |                             |
| 1242 | 2001 | 480 |     | silver   | 250    | Pink      |                             |
| 1243 | 2001 | 480 |     | silver   | 255    | Pink      |                             |
| 1244 | 2001 | 480 |     | silver   | 266    | Pink      |                             |
| 1245 | 2001 | 480 |     | silver   | 286    | Pink      |                             |
| 1246 | 2001 | 480 |     | silver   | 336    | Pink      |                             |
| 1247 | 2001 | 490 |     | silver   | 30     | Pink      |                             |
| 1248 | 2001 | 490 |     | silver   | 58     | Pink      |                             |
| 1249 | 2001 | 490 |     | silver   | 59     | Pink      |                             |
| 1250 | 2001 | 490 |     | silver   | 99     | Pink      |                             |
| 1251 | 2001 | 490 |     | silver   | 110    | Pink      |                             |
| 1252 | 2001 | 490 |     | silver   | 134    | Pink      |                             |



|      | Year | Lth | Sex | Maturity | Tag No | Tag Color | Notes   |
|------|------|-----|-----|----------|--------|-----------|---------|
| 1253 | 2001 | 490 |     | silver   | 147    | Pink      |         |
| 1254 | 2001 | 490 |     | silver   | 151    | Pink      |         |
| 1255 | 2001 | 490 |     | silver   | 160    | Pink      |         |
| 1256 | 2001 | 490 |     | silver   | 182    | Pink      |         |
| 1257 | 2001 | 490 |     | silver   | 218    | Pink      |         |
| 1258 | 2001 | 490 |     | silver   | 296    | Pink      |         |
| 1259 | 2001 | 490 |     | silver   | 317    | Pink      |         |
| 1260 | 2001 | 490 |     | silver   | 319    | Pink      |         |
| 1261 | 2001 | 490 |     | silver   | 323    | Pink      |         |
| 1262 | 2001 | 490 |     | silver   | 333    | Pink      |         |
| 1263 | 2001 | 490 |     | silver   | 335    | Pink      |         |
| 1264 | 2001 | 490 |     | silver   | 344    | Pink      |         |
| 1265 | 2001 | 490 |     | silver   | 352    | Pink      |         |
| 1266 | 2001 | 490 |     | silver   | 364    | Pink      |         |
| 1267 | 2001 | 490 |     | silver   | 372    | Pink      |         |
| 1268 | 2001 | 500 |     | silver   | 31     | Pink      |         |
| 1269 | 2001 | 500 |     | silver   | 83     | Pink      |         |
| 1270 | 2001 | 500 |     | silver   | 92     | Pink      |         |
| 1271 | 2001 | 500 |     | silver   | 176    | Pink      |         |
| 1272 | 2001 | 500 |     | silver   | 196    | Pink      |         |
| 1273 | 2001 | 500 |     | silver   | 240    | Pink      |         |
| 1274 | 2001 | 500 |     | silver   | 251    | Pink      |         |
| 1275 | 2001 | 500 |     | silver   | 280    | Pink      |         |
| 1276 | 2001 | 500 |     | silver   | 314    | Pink      |         |
| 1277 | 2001 | 500 |     | silver   | 343    | Pink      |         |
| 1278 | 2001 | 500 |     | silver   | 387    | Pink      |         |
| 1279 | 2001 | 510 |     | silver   | 1      | Pink      |         |
| 1280 | 2001 | 510 |     | silver   | 68     | Pink      |         |
| 1281 | 2001 | 510 |     | silver   | 131    | Pink      |         |
| 1282 | 2001 | 510 |     | silver   | 179    | Pink      |         |
| 1283 | 2001 | 510 |     | silver   | 185    | Pink      |         |
| 1284 | 2001 | 510 |     | silver   | 237    | Pink      | GILLNET |
| 1285 | 2001 | 510 |     | silver   | 282    | Pink      | MARKS   |
| 1286 | 2001 | 510 |     | silver   | 339    | Pink      |         |
| 1287 | 2001 | 510 |     | silver   | 348    | Pink      |         |
| 1288 | 2001 | 510 |     | silver   | 375    | Pink      |         |
| 1289 | 2001 | 510 |     | silver   | 413    | Pink      |         |
| 1290 | 2001 | 510 |     | silver   | 418    | Pink      |         |
| 1291 | 2001 | 520 |     | silver   | 14     | Pink      |         |
| 1292 | 2001 | 520 |     | silver   | 15     | Pink      |         |
| 1293 | 2001 | 520 |     | silver   | 55     | Pink      |         |
| 1294 | 2001 | 520 |     | silver   | 63     | Pink      |         |
| 1295 | 2001 | 520 |     | silver   | 103    | Pink      |         |
| 1296 | 2001 | 520 |     | silver   | 155    | Pink      |         |
| 1297 | 2001 | 520 |     | silver   | 165    | Pink      |         |
| 1298 | 2001 | 520 |     | silver   | 180    | Pink      | SKINNY  |
| 1299 | 2001 | 520 |     | silver   | 186    | Pink      |         |
| 1300 | 2001 | 520 |     | silver   | 197    | Pink      |         |

|      | Year | Lth | Sex | Maturity | Tag No  | Tag Color | Notes   |
|------|------|-----|-----|----------|---------|-----------|---|
| 1301 | 2001 | 520 |     | silver   | 202     | Pink      |   |
| 1302 | 2001 | 520 |     | silver   | 249     | Pink      |   |
| 1303 | 2001 | 520 |     | silver   | 278     | Pink      |   |
| 1304 | 2001 | 520 |     | silver   | 298     | Pink      |   |
| 1305 | 2001 | 520 |     | silver   | 328     | Pink      |   |
| 1306 | 2001 | 520 |     | silver   | 411     | Pink      |   |
| 1307 | 2001 | 530 |     | silver   | 21      | Pink      |   |
| 1308 | 2001 | 530 |     | silver   | 74      | Pink      |   |
|      |      |     |     |          |         |           | OLD<br>INJURY ON<br>SNOUT                     |
| 1309 | 2001 | 530 |     | silver   | 198     | Pink      |   |
| 1310 | 2001 | 530 |     | silver   | 221     | Pink      |   |
| 1311 | 2001 | 530 |     | silver   | 334     | Pink      |   |
| 1312 | 2001 | 530 |     | silver   | 337     | Pink      |   |
| 1313 | 2001 | 530 |     | silver   | 338     | Pink      |   |
| 1314 | 2001 | 530 |     | silver   | 379     | Pink      |   |
| 1315 | 2001 | 530 |     | silver   | 380     | Pink      |   |
| 1316 | 2001 | 540 |     | silver   | 167     | Pink      |   |
| 1317 | 2001 | 540 |     | silver   | 199     | Pink      |   |
| 1318 | 2001 | 540 |     | silver   | 257     | Pink      |   |
| 1319 | 2001 | 540 |     | silver   | 276     | Pink      |   |
| 1320 | 2001 | 540 |     | silver   | 303     | Pink      |   |
| 1321 | 2001 | 540 |     | silver   | 412     | Pink      |   |
| 1322 | 2001 | 550 |     | silver   | 56      | Pink      |   |
| 1323 | 2001 | 550 |     | silver   | 227     | Pink      |   |
| 1324 | 2001 | 550 |     | silver   | 327     | Pink      |   |
| 1325 | 2001 | 560 |     | silver   | 163     | Pink      |   |
| 1326 | 2001 | 560 |     | silver   | 204     | Pink      |   |
| 1327 | 2001 | 560 |     | silver   | 331     | Pink      |   |
| 1328 | 2001 | 560 |     | silver   | 383     | Pink      |   |
| 1329 | 2001 | 570 |     | silver   | 34      | Pink      |   |
| 1330 | 2001 | 570 |     | silver   | 43      | Pink      |   |
| 1331 | 2001 | 570 |     | silver   | 181     | Pink      |   |
| 1332 | 2001 | 570 |     | silver   | 340     | Pink      |   |
| 1333 | 2001 | 570 |     | silver   | 310/311 | Pink      |   |
|      |      |     |     |          |         |           | RECAP<br>RR00335<br>WHITE -<br>tag<br>removed |
| 1334 | 2001 | 574 |     | silver   | 386     | Pink      |   |
| 1335 | 2001 | 580 |     | silver   | 47      | Pink      |   |
| 1336 | 2001 | 580 |     | silver   | 49      | Pink      |   |
| 1337 | 2001 | 580 |     | silver   | 115     | Pink      |   |
| 1338 | 2001 | 580 |     | silver   | 137     | Pink      |   |
| 1339 | 2001 | 580 |     | silver   | 223     | Pink      |   |
| 1340 | 2001 | 580 |     | silver   | 224     | Pink      |   |
| 1341 | 2001 | 590 |     | silver   | 365     | Pink      |   |
| 1342 | 2001 | 600 |     | silver   | 154     | Pink      |   |
| 1343 | 2001 | 610 |     | silver   | 108     | Pink      |   |
| 1344 | 2001 | 620 |     | silver   | 422     | Pink      |   |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 1345 | 2001        | 620        |            | silver          | 158/159       | Pink             |              |
| 1346 | 2001        | 630        |            | silver          | 124           | Pink             |              |
| 1347 | 2001        | 630        |            | silver          | 171           | Pink             |              |
| 1348 | 2001        | 640        |            | silver          | 173           | Pink             |              |
| 1349 | 2001        | 680        |            | silver          | 272           | Pink             |              |
| 1350 | 2004        | 405        | female     | spawner         | 15            | white            |              |
| 1351 | 2004        | 412        | female     | spawner         | 51            | white            |              |
| 1352 | 2004        | 415        | female     | spawner         | 246           | white            |              |
| 1353 | 2004        | 420        | female     | spawner         | 20            | white            |              |
| 1354 | 2004        | 420        | female     | spawner         | 162           | white            |              |
| 1355 | 2004        | 420        | female     | spawner         | 219           | white            |              |
| 1356 | 2004        | 420        | female     | spawner         | 221           | white            |              |
| 1357 | 2004        | 425        | female     | spawner         | 23            | white            |              |
| 1358 | 2004        | 425        | female     | spawner         | 38            | white            |              |
| 1359 | 2004        | 425        | female     | spawner         | 132           | white            |              |
| 1360 | 2004        | 425        | female     | spawner         | 232           | white            |              |
| 1361 | 2004        | 425        | female     | spawner         | 272           | white            |              |
| 1362 | 2004        | 426        | female     | spawner         | 8             | white            |              |
| 1363 | 2004        | 426        | female     | spawner         | 76            | white            |              |
| 1364 | 2004        | 430        | female     | spawner         | 65            | white            |              |
| 1365 | 2004        | 430        | female     | spawner         | 141           | white            |              |
| 1366 | 2004        | 430        | female     | spawner         | 267           | white            |              |
| 1367 | 2004        | 435        | female     | spawner         | 5             | white            |              |
| 1368 | 2004        | 435        | female     | spawner         | 138           | white            |              |
| 1369 | 2004        | 435        | female     | spawner         | 179           | white            |              |
| 1370 | 2004        | 436        | female     | spawner         | 53            | white            |              |
| 1371 | 2004        | 440        | female     | spawner         | 18            | white            |              |
| 1372 | 2004        | 440        | female     | spawner         | 230           | white            |              |
| 1373 | 2004        | 440        | female     | spawner         | 276           | white            |              |
| 1374 | 2004        | 445        | female     | spawner         | 58            | white            |              |
| 1375 | 2004        | 445        | female     | spawner         | 77            | white            |              |
| 1376 | 2004        | 445        | female     | spawner         | 93            | white            |              |
| 1377 | 2004        | 445        | female     | spawner         | 226           | white            |              |
| 1378 | 2004        | 445        | female     | spawner         | 280           | white            |              |
| 1379 | 2004        | 450        | female     | spawner         | 46            | white            |              |
| 1380 | 2004        | 450        | female     | spawner         | 105           | white            |              |
| 1381 | 2004        | 450        | female     | spawner         | 213           | white            |              |
| 1382 | 2004        | 450        | female     | spawner         | 243           | white            |              |
| 1383 | 2004        | 450        | female     | spawner         | 283           | white            |              |
| 1384 | 2004        | 450        | female     | spawner         | 324           | white            |              |
| 1385 | 2004        | 455        | female     | spawner         | 131           | white            |              |
| 1386 | 2004        | 460        | female     | spawner         | 10            | white            |              |
| 1387 | 2004        | 460        | female     | spawner         | 28            | white            |              |
| 1388 | 2004        | 460        | female     | spawner         | 78            | white            |              |
| 1389 | 2004        | 460        | female     | spawner         | 145           | white            |              |
| 1390 | 2004        | 460        | female     | spawner         | 180           | white            |              |
| 1391 | 2004        | 460        | female     | spawner         | 186           | white            |              |
| 1392 | 2004        | 460        | female     | spawner         | 193           | white            |              |
| 1393 | 2004        | 460        | female     | spawner         | 223           | white            |              |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 1394 | 2004        | 460        | female     | spawner         | 233           | white            |              |
| 1395 | 2004        | 460        | female     | spawner         | 239           | white            |              |
| 1396 | 2004        | 460        | female     | spawner         | 250           | white            |              |
| 1397 | 2004        | 465        | female     | spawner         | 1             | white            |              |
| 1398 | 2004        | 465        | female     | spawner         | 45            | white            |              |
| 1399 | 2004        | 465        | female     | spawner         | 103           | white            |              |
| 1400 | 2004        | 465        | female     | spawner         | 119           | white            |              |
| 1401 | 2004        | 465        | female     | spawner         | 120           | white            |              |
| 1402 | 2004        | 465        | female     | spawner         | 261           | white            |              |
| 1403 | 2004        | 465        | female     | spawner         | 266           | white            |              |
| 1404 | 2004        | 470        | female     | spawner         | 118           | white            |              |
| 1405 | 2004        | 470        | female     | spawner         | 140           | white            |              |
| 1406 | 2004        | 470        | female     | spawner         | 154           | white            |              |
| 1407 | 2004        | 470        | female     | spawner         | 247           | white            |              |
| 1408 | 2004        | 470        | female     | spawner         | 322           | white            |              |
| 1409 | 2004        | 471        | female     | spawner         | 22            | white            |              |
| 1410 | 2004        | 471        | female     | spawner         | 44            | white            |              |
| 1411 | 2004        | 475        | female     | spawner         | 14            | white            |              |
| 1412 | 2004        | 475        | female     | spawner         | 52            | white            |              |
| 1413 | 2004        | 475        | female     | spawner         | 174           | white            |              |
| 1414 | 2004        | 475        | female     | spawner         | 259           | white            |              |
| 1415 | 2004        | 475        | female     | spawner         | 288           | white            |              |
| 1416 | 2004        | 475        | female     | spawner         | 290           | white            |              |
| 1417 | 2004        | 478        | female     | spawner         | 68            | white            |              |
| 1418 | 2004        | 480        | female     | spawner         | 7             | white            |              |
| 1419 | 2004        | 480        | female     | spawner         | 113           | white            |              |
| 1420 | 2004        | 480        | female     | spawner         | 146           | white            |              |
| 1421 | 2004        | 480        | female     | spawner         | 175           | white            |              |
| 1422 | 2004        | 480        | female     | spawner         | 189           | white            |              |
| 1423 | 2004        | 480        | female     | spawner         | 227           | white            |              |
| 1424 | 2004        | 480        | female     | spawner         | 254           | white            |              |
| 1425 | 2004        | 480        | female     | spawner         | 286           | white            |              |
| 1426 | 2004        | 480        | female     | spawner         | 295           | white            |              |
| 1427 | 2004        | 482        | female     | spawner         | 32            | white            |              |
| 1428 | 2004        | 485        | female     | spawner         | 2             | white            |              |
| 1429 | 2004        | 485        | female     | spawner         | 35            | white            |              |
| 1430 | 2004        | 485        | female     | spawner         | 92            | white            |              |
| 1431 | 2004        | 485        | female     | spawner         | 124           | white            |              |
| 1432 | 2004        | 485        | female     | spawner         | 139           | white            |              |
| 1433 | 2004        | 485        | female     | spawner         | 207           | white            |              |
| 1434 | 2004        | 485        | female     | spawner         | 277           | white            |              |
| 1435 | 2004        | 487        | female     | spawner         | 56/57         | white            |              |
| 1436 | 2004        | 490        | female     | spawner         | 121           | white            |              |
| 1437 | 2004        | 490        | female     | spawner         | 143           | white            |              |
| 1438 | 2004        | 490        | female     | spawner         | 201           | white            |              |
| 1439 | 2004        | 490        | female     | spawner         | 212           | white            |              |
| 1440 | 2004        | 490        | female     | spawner         | 214           | white            |              |
| 1441 | 2004        | 490        | female     | spawner         | 222           | white            |              |
| 1442 | 2004        | 490        | female     | spawner         | 225           | white            |              |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 1443 | 2004        | 490        | female     | spawner         | 257           | white            |              |
| 1444 | 2004        | 490        | female     | spawner         | 279           | white            |              |
| 1445 | 2004        | 490        | female     | spawner         | 287           | white            |              |
| 1446 | 2004        | 495        | female     | spawner         | 89            | white            |              |
| 1447 | 2004        | 495        | female     | spawner         | 137           | white            |              |
| 1448 | 2004        | 495        | female     | spawner         | 173           | white            |              |
| 1449 | 2004        | 499        | female     | spawner         | 74            | white            |              |
| 1450 | 2004        | 500        | female     | spawner         | 112           | white            |              |
| 1451 | 2004        | 500        | female     | spawner         | 135           | white            |              |
| 1452 | 2004        | 500        | female     | spawner         | 150           | white            |              |
| 1453 | 2004        | 500        | female     | spawner         | 188           | white            |              |
| 1454 | 2004        | 500        | female     | spawner         | 203           | white            |              |
| 1455 | 2004        | 500        | female     | spawner         | 224           | white            |              |
| 1456 | 2004        | 504        | female     | spawner         | 29            | white            |              |
| 1457 | 2004        | 505        | female     | spawner         | 6             | white            |              |
| 1458 | 2004        | 505        | female     | spawner         | 27            | white            |              |
| 1459 | 2004        | 505        | female     | spawner         | 170           | white            |              |
| 1460 | 2004        | 510        | female     | spawner         | 36            | white            |              |
| 1461 | 2004        | 510        | female     | spawner         | 84            | white            |              |
| 1462 | 2004        | 510        | female     | spawner         | 85            | white            |              |
| 1463 | 2004        | 510        | female     | spawner         | 90            | white            |              |
| 1464 | 2004        | 510        | female     | spawner         | 114           | white            |              |
| 1465 | 2004        | 510        | female     | spawner         | 123           | white            |              |
| 1466 | 2004        | 510        | female     | spawner         | 291           | white            |              |
| 1467 | 2004        | 515        | female     | spawner         | 142           | white            |              |
| 1468 | 2004        | 515        | female     | spawner         | 162           | white            |              |
| 1469 | 2004        | 515        | female     | spawner         | 166           | white            |              |
| 1470 | 2004        | 515        | female     | spawner         | 194           | white            |              |
| 1471 | 2004        | 520        | female     | spawner         | 82            | white            |              |
| 1472 | 2004        | 520        | female     | spawner         | 83            | white            |              |
| 1473 | 2004        | 520        | female     | spawner         | 126           | white            |              |
| 1474 | 2004        | 520        | female     | spawner         | 177           | white            |              |
| 1475 | 2004        | 520        | female     | spawner         | 231           | white            |              |
| 1476 | 2004        | 520        | female     | spawner         | 269           | white            |              |
| 1477 | 2004        | 525        | female     | spawner         | 24            | white            |              |
| 1478 | 2004        | 525        | female     | spawner         | 149           | white            |              |
| 1479 | 2004        | 525        | female     | spawner         | 191           | white            |              |
| 1480 | 2004        | 525        | female     | spawner         | 206           | white            |              |
| 1481 | 2004        | 525        | female     | spawner         | 275           | white            |              |
| 1482 | 2004        | 528        | female     | spawner         | 97            | white            |              |
| 1483 | 2004        | 530        | female     | spawner         | 94            | white            |              |
| 1484 | 2004        | 530        | female     | spawner         | 95            | white            |              |
| 1485 | 2004        | 530        | female     | spawner         | 209           | white            |              |
| 1486 | 2004        | 530        | female     | spawner         | 218           | white            |              |
| 1487 | 2004        | 530        | female     | spawner         | 234           | white            |              |
| 1488 | 2004        | 530        | female     | spawner         | 260           | white            |              |
| 1489 | 2004        | 530        | female     | spawner         | 323           | white            |              |
| 1490 | 2004        | 530        | female     | spawner         | 325           | white            |              |
| 1491 | 2004        | 531        | female     | spawner         | 48            | white            |              |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 1492 | 2004        | 535        | female     | spawner         | 40            | white            |              |
| 1493 | 2004        | 535        | female     | spawner         | 128           | white            |              |
| 1494 | 2004        | 535        | female     | spawner         | 136           | white            |              |
| 1495 | 2004        | 535        | female     | spawner         | 144           | white            |              |
| 1496 | 2004        | 535        | female     | spawner         | 196           | white            |              |
| 1497 | 2004        | 540        | female     | spawner         | 122           | white            |              |
| 1498 | 2004        | 540        | female     | spawner         | 210           | white            |              |
| 1499 | 2004        | 543        | female     | spawner         | 30            | white            |              |
| 1500 | 2004        | 545        | female     | spawner         | 115           | white            |              |
| 1501 | 2004        | 545        | female     | spawner         | 163           | white            |              |
| 1502 | 2004        | 545        | female     | spawner         | 206           | white            |              |
| 1503 | 2004        | 545        | female     | spawner         | 208           | white            |              |
| 1504 | 2004        | 550        | female     | spawner         | 187           | white            |              |
| 1505 | 2004        | 550        | female     | spawner         | 269           | white            |              |
| 1506 | 2004        | 550        | female     | spawner         | 269           | white            |              |
| 1507 | 2004        | 555        | female     | spawner         | 130           | white            |              |
| 1508 | 2004        | 555        | female     | spawner         | 147           | white            |              |
| 1509 | 2004        | 560        | female     | spawner         | 155           | white            |              |
| 1510 | 2004        | 560        | female     | spawner         | 198           | white            |              |
| 1511 | 2004        | 565        | female     | spawner         | 4             | white            |              |
| 1512 | 2004        | 570        | female     | spawner         | 178           | white            |              |
| 1513 | 2004        | 570        | female     | spawner         | 299           | white            |              |
| 1514 | 2004        | 578        | female     | spawner         | 21            | white            |              |
| 1515 | 2004        | 580        | female     | spawner         | 19            | white            |              |
| 1516 | 2004        | 580        | female     | spawner         | 181           | white            |              |
| 1517 | 2004        | 590        | female     | spawner         | 98            | white            |              |
| 1518 | 2004        | 590        | female     | spawner         | 108           | white            |              |
| 1519 | 2004        | 590        | female     | spawner         | 153           | white            |              |
| 1520 | 2004        | 590        | female     | spawner         | 281           | white            |              |
| 1521 | 2004        | 590        | female     | spawner         | 282           | white            |              |
| 1522 | 2004        | 235        | male       | resident        |               |                  |              |
| 1523 | 2004        | 525        | male       | spawner         | 81            | white            |              |
| 1524 | 2004        | 535        | male       | spawner         | 184/185       | white            |              |
| 1525 | 2004        | 560        | male       | spawner         | 236           | white            |              |
| 1526 | 2004        | 680        | male       | spawner         | 244           | white            |              |
| 1527 | 2004        | 320        |            | silver          | 265           | white            |              |
| 1528 | 2004        | 325        |            | silver          | 321           | white            |              |
| 1529 | 2004        | 329        |            | silver          | 39            | white            |              |
| 1530 | 2004        | 330        |            | silver          | 215           | white            |              |
| 1531 | 2004        | 331        |            | silver          | 12            | white            |              |
| 1532 | 2004        | 335        |            | silver          | 176           | white            |              |
| 1533 | 2004        | 337        |            | silver          | 26            | white            |              |
| 1534 | 2004        | 340        |            | silver          | 9             | white            |              |
| 1535 | 2004        | 340        |            | silver          | 238           | white            |              |
| 1536 | 2004        | 345        |            | silver          | 11            | white            |              |
| 1537 | 2004        | 345        |            | silver          | 31            | white            |              |
| 1538 | 2004        | 345        |            | silver          | 172           | white            |              |
| 1539 | 2004        | 345        |            | silver          | 211           | white            |              |
| 1540 | 2004        | 345        |            | silver          | 294           | white            |              |

|      | Year | Lth | Sex | Maturity | Tag No  | Tag Color | Notes  |
|------|------|-----|-----|----------|---------|-----------|--|
| 1541 | 2004 | 350 |     | silver   | 264     | white     |  |
| 1542 | 2004 | 355 |     | silver   | 69      | white     |  |
| 1543 | 2004 | 360 |     | silver   | 88      | white     |  |
| 1544 | 2004 | 362 |     | silver   | 25      | white     |  |
| 1545 | 2004 | 365 |     | silver   | 127     | white     |  |
| 1546 | 2004 | 379 |     | silver   | 37      | white     |  |
| 1547 | 2004 | 385 |     | silver   | 240     | white     |  |
| 1548 | 2004 | 389 |     | silver   | 13      | white     |  |
| 1549 | 2004 | 390 |     | silver   | 237     | white     |  |
| 1550 | 2004 | 390 |     | silver   | 258     | white     |  |
| 1551 | 2004 | 390 |     | silver   | 300     | white     |  |
| 1552 | 2004 | 400 |     | silver   | 125     | white     |  |
| 1553 | 2004 | 400 |     | silver   | 171     | white     |  |
| 1554 | 2004 | 402 |     | silver   | 71      | white     |  |
| 1555 | 2004 | 415 |     | silver   | 42      | white     |  |
| 1556 | 2004 | 415 |     | silver   | 167     | white     |  |
| 1557 | 2004 | 415 |     | silver   | 278     | white     |  |
| 1558 | 2004 | 420 |     | silver   | 47      | white     |  |
| 1559 | 2004 | 420 |     | silver   | 268     | white     |  |
| 1560 | 2004 | 420 |     | silver   | 66/67   | white     |  |
| 1561 | 2004 | 425 |     | silver   | 91      | white     |  |
|      |      |     |     |          |         |           | large wound<br>(bald<br>eagle? -<br>one seen<br>fishing<br>upstream) |
| 1562 | 2004 | 425 |     | silver   |         |           |  |
| 1563 | 2004 | 430 |     | silver   | 235     | white     |  |
| 1564 | 2004 | 430 |     | silver   | 241     | white     |  |
| 1565 | 2004 | 430 |     | silver   | 249     | white     |  |
| 1566 | 2004 | 430 |     | silver   | 116/117 | white     |  |
| 1567 | 2004 | 435 |     | silver   | 106     | white     |  |
| 1568 | 2004 | 435 |     | silver   | 133     | white     |  |
| 1569 | 2004 | 435 |     | silver   | 202     | white     |  |
| 1570 | 2004 | 435 |     | silver   | 255/256 | white     |  |
| 1571 | 2004 | 440 |     | silver   | 107     | white     |  |
| 1572 | 2004 | 440 |     | silver   | 148     | white     |  |
| 1573 | 2004 | 445 |     | silver   | 289     | white     |  |
| 1574 | 2004 | 445 |     | silver   | 298     | white     |  |
| 1575 | 2004 | 445 |     | silver   | 61/62   | white     |  |
| 1576 | 2004 | 450 |     | silver   | 109     | white     |  |
| 1577 | 2004 | 450 |     | silver   | 134     | white     |  |
| 1578 | 2004 | 450 |     | silver   | 274     | white     |  |
| 1579 | 2004 | 456 |     | silver   | 55/54   | white     |  |
| 1580 | 2004 | 457 |     | silver   | 72/73   | white     |  |
| 1581 | 2004 | 474 |     | silver   | 156/157 | white     |  |
| 1582 | 2004 | 475 |     | silver   | 34      | white     |  |
| 1583 | 2004 | 475 |     | silver   | 104     | white     |  |
| 1584 | 2004 | 475 |     | silver   | 160/161 | white     |  |
| 1585 | 2004 | 480 |     | silver   | 50      | white     |  |

|      | Year | Lth | Sex | Maturity | Tag No  | Tag Color | Notes   |
|------|------|-----|-----|----------|---------|-----------|---|
| 1586 | 2004 | 480 |     | silver   | 270     | white     |   |
| 1587 | 2004 | 480 |     | silver   | 273     | white     |   |
| 1588 | 2004 | 480 |     | silver   | 195/197 | white     |   |
| 1589 | 2004 | 480 |     | silver   | 284/285 | white     |   |
| 1590 | 2004 | 484 |     | silver   | 49      | white     |   |
| 1591 | 2004 | 490 |     | silver   | 220     | white     |   |
| 1592 | 2004 | 490 |     | silver   | 101/102 | white     |   |
| 1593 | 2004 | 490 |     | silver   | 168/169 | white     |   |
| 1594 | 2004 | 490 |     | silver   |         |           | killed for<br>dinner  |
| 1595 | 2004 | 498 |     | silver   | 70      | white     |   |
| 1596 | 2004 | 500 |     | silver   | 41      | white     |   |
| 1597 | 2004 | 500 |     | silver   | 129     | white     |   |
| 1598 | 2004 | 500 |     | silver   | 110/111 | white     |   |
| 1599 | 2004 | 505 |     | silver   | 151/152 | white     |   |
| 1600 | 2004 | 505 |     | silver   | 190/192 | white     |   |
| 1601 | 2004 | 505 |     | silver   | 79/80   | white     |   |
| 1602 | 2004 | 510 |     | silver   | 271     | white     |   |
| 1603 | 2004 | 510 |     | silver   | 158/159 | white     |   |
| 1604 | 2004 | 510 |     | silver   | 262/263 | white     |   |
| 1605 | 2004 | 510 |     | silver   | 59/60   | white     |   |
| 1606 | 2004 | 515 |     | silver   | 3       | white     |   |
| 1607 | 2004 | 515 |     | silver   | 164/165 | white     |   |
| 1608 | 2004 | 520 |     | silver   | 33      | white     |   |
| 1609 | 2004 | 520 |     | silver   | 43      | white     |   |
| 1610 | 2004 | 525 |     | silver   | 204/205 | white     |   |
| 1611 | 2004 | 530 |     | silver   | 75      | white     |   |
| 1612 | 2004 | 530 |     | silver   | 243     | white     |   |
| 1613 | 2004 | 530 |     | silver   | 182/183 | white     |   |
| 1614 | 2004 | 532 |     | silver   | 95/96   | white     |   |
| 1615 | 2004 | 535 |     | silver   | 99/100  | white     |   |
| 1616 | 2004 | 542 |     | silver   | 86/87   | white     |   |
| 1617 | 2004 | 545 |     | silver   | 292/293 | white     |   |
| 1618 | 2004 | 550 |     | silver   | 199/200 | white     |   |
| 1619 | 2004 | 555 |     | silver   | 251     | white     |   |
| 1620 | 2004 | 555 |     | silver   | 216/217 | white     |   |
| 1621 | 2004 | 555 |     | silver   | 252/253 | white     |   |
| 1622 | 2004 | 570 |     | silver   | 16      | white     |   |
| 1623 | 2004 | 570 |     | silver   | 296/297 | white     |   |
| 1624 | 2004 | 573 |     | silver   | 63/64   | white     |   |
| 1625 | 2004 | 660 |     | silver   | 228/229 | white     |   |
| 1626 | 2004 | 664 |     | silver   | 17      | white     |   |
| 1627 | 2004 | 513 |     |          |         | white     | killed for<br>dinner 2004<br>tag 86<br>angled<br>below camp<br>(~525mm) |
| 1628 | 2004 | 525 |     |          | 160     | white     |   |
| 1629 | 2004 | 535 |     |          | 393     | white     |   |
| 1630 | 2004 | 550 |     |          | 268     | white     |   |



|      | Year | Lth | Sex    | Maturity | Tag No | Tag Color | Notes<br>angled<br>below camp<br>(~575mm) |
|------|------|-----|--------|----------|--------|-----------|---|
| 1631 | 2004 | 575 |        |          | 423    | white     |   |
| 1632 | 2007 | 400 | female | spawner  | 197    | green     |   |
| 1633 | 2007 | 400 | female | spawner  | 305    | green     |   |
| 1634 | 2007 | 410 | female | spawner  | 378    | green     |   |
| 1635 | 2007 | 410 | female | spawner  | 417    | green     |   |
| 1636 | 2007 | 420 | female | spawner  | 17     | green     |   |
| 1637 | 2007 | 420 | female | spawner  | 133    | green     |   |
| 1638 | 2007 | 420 | female | spawner  | 210    | green     |   |
| 1639 | 2007 | 420 | female | spawner  | 276    | green     |   |
| 1640 | 2007 | 420 | female | spawner  | 400    | green     |   |
| 1641 | 2007 | 430 | female | spawner  | 183    | green     |   |
| 1642 | 2007 | 430 | female | spawner  | 191    | green     |   |
| 1643 | 2007 | 430 | female | spawner  | 230    | green     |   |
| 1644 | 2007 | 430 | female | spawner  | 289    | green     |   |
| 1645 | 2007 | 430 | female | spawner  | 309    | green     |   |
| 1646 | 2007 | 430 | female | spawner  | 408    | green     |   |
| 1647 | 2007 | 430 | female | spawner  | 411    | green     |   |
| 1648 | 2007 | 440 | female | spawner  | 156    | green     |   |
| 1649 | 2007 | 440 | female | spawner  | 363    | green     |   |
| 1650 | 2007 | 440 | female | spawner  | 382    | green     |   |
| 1651 | 2007 | 450 | female | spawner  | 69     | green     |   |
| 1652 | 2007 | 450 | female | spawner  | 105    | green     |   |
| 1653 | 2007 | 450 | female | spawner  | 125    | green     |   |
| 1654 | 2007 | 450 | female | spawner  | 130    | green     |   |
| 1655 | 2007 | 450 | female | spawner  | 214    | green     |   |
| 1656 | 2007 | 450 | female | spawner  | 228    | green     |   |
| 1657 | 2007 | 450 | female | spawner  | 261    | green     |   |
| 1658 | 2007 | 450 | female | spawner  | 273    | green     |   |
| 1659 | 2007 | 450 | female | spawner  | 407    | green     |   |
| 1660 | 2007 | 460 | female | spawner  | 5      | green     |   |
| 1661 | 2007 | 460 | female | spawner  | 6      | green     |   |
| 1662 | 2007 | 460 | female | spawner  | 9      | green     |   |
| 1663 | 2007 | 460 | female | spawner  | 184    | green     |   |
| 1664 | 2007 | 460 | female | spawner  | 199    | green     |   |
| 1665 | 2007 | 460 | female | spawner  | 204    | green     |   |
| 1666 | 2007 | 460 | female | spawner  | 368    | green     |   |
| 1667 | 2007 | 470 | female | spawner  | 32     | green     |   |
| 1668 | 2007 | 470 | female | spawner  | 46     | green     |   |
| 1669 | 2007 | 470 | female | spawner  | 88     | green     |   |
| 1670 | 2007 | 470 | female | spawner  | 98     | green     |   |
| 1671 | 2007 | 470 | female | spawner  | 181    | green     |   |
| 1672 | 2007 | 470 | female | spawner  | 233    | green     |   |
| 1673 | 2007 | 470 | female | spawner  | 333    | green     |   |
| 1674 | 2007 | 470 | female | spawner  | 353    | green     |   |
| 1675 | 2007 | 470 | female | spawner  | 376    | green     |   |
| 1676 | 2007 | 470 | female | spawner  | 433    | green     |   |
| 1677 | 2007 | 480 | female | spawner  | 75     | green     |   |
| 1678 | 2007 | 480 | female | spawner  | 144    | green     |   |

|      | Year | Lth | Sex    | Maturity | Tag No | Tag Color | Notes  |
|------|------|-----|--------|----------|--------|-----------|--|
| 1679 | 2007 | 480 | female | spawner  | 147    | green     |  |
| 1680 | 2007 | 480 | female | spawner  | 331    | green     |  |
| 1681 | 2007 | 480 | female | spawner  | 339    | green     |  |
| 1682 | 2007 | 480 | female | spawner  | 346    | green     |  |
| 1683 | 2007 | 490 | female | spawner  | 18     | green     |  |
| 1684 | 2007 | 490 | female | spawner  | 48     | green     |  |
| 1685 | 2007 | 490 | female | spawner  | 58     | green     |  |
| 1686 | 2007 | 490 | female | spawner  | 168    | green     |  |
| 1687 | 2007 | 490 | female | spawner  | 246    | green     |  |
| 1688 | 2007 | 490 | female | spawner  | 335    | green     |  |
| 1689 | 2007 | 500 | female | spawner  | 29     | green     |  |
| 1690 | 2007 | 500 | female | spawner  | 354    | green     |  |
| 1691 | 2007 | 500 | female | spawner  | 381    | green     |  |
| 1692 | 2007 | 500 | female | spawner  | 405    | green     |  |
| 1693 | 2007 | 510 | female | spawner  | 81     | green     |  |
| 1694 | 2007 | 510 | female | spawner  | 97     | green     |  |
| 1695 | 2007 | 510 | female | spawner  | 186    |           | Recap - pink?  |
| 1696 | 2007 | 510 | female | spawner  | 328    | green     |  |
| 1697 | 2007 | 510 | female | spawner  | 371    | green     |  |
| 1698 | 2007 | 510 | female | spawner  | 390    | green     |  |
| 1699 | 2007 | 520 | female | spawner  | 76     | green     |  |
| 1700 | 2007 | 520 | female | spawner  | 177    | green     |  |
| 1701 | 2007 | 520 | female | spawner  | 208    | green     |  |
| 1702 | 2007 | 520 | female | spawner  | 213    | green     |  |
| 1703 | 2007 | 520 | female | spawner  | 349    | green     |  |
| 1704 | 2007 | 530 | female | spawner  | 49     | green     |  |
| 1705 | 2007 | 530 | female | spawner  | 51     | green     |  |
| 1706 | 2007 | 530 | female | spawner  | 64     | green     |  |
| 1707 | 2007 | 530 | female | spawner  | 159    | green     |  |
| 1708 | 2007 | 530 | female | spawner  | 288    |           | Recap (tag faded - pink?)<br>recap tag #289 - tag removed and not re-tagged (infected) |
| 1709 | 2007 | 530 | female | spawner  | 289    |           |  |
| 1710 | 2007 | 530 | female | spawner  | 362    | green     |  |
| 1711 | 2007 | 530 | female | spawner  | 404    | green     |  |
| 1712 | 2007 | 540 | female | spawner  | 221    | green     |  |
| 1713 | 2007 | 540 | female | spawner  | 225    | green     |  |
| 1714 | 2007 | 550 | female | spawner  | 42     | green     |  |
| 1715 | 2007 | 550 | female | spawner  | 78     | green     |  |
| 1716 | 2007 | 550 | female | spawner  | 201    | green     |  |
| 1717 | 2007 | 550 | female | spawner  | 279    |           | Recap (tag faded - pink?)  |
| 1718 | 2007 | 560 | female | spawner  | 83     | green     |  |
| 1719 | 2007 | 570 | female | spawner  | 66     | green     |  |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b>                    |
|------|-------------|------------|------------|-----------------|---------------|------------------|---------------------------------|
| 1720 | 2007        | 570        | female     | spawner         | 67            | green            |                                 |
| 1721 | 2007        | 570        | female     | spawner         | 118           | green            |                                 |
| 1722 | 2007        | 580        | female     | spawner         | 218           |                  | Recap -<br>pink?                |
| 1723 | 2007        | 580        | female     | spawner         | 344           | green            |                                 |
| 1724 | 2007        | 580        | female     | spawner         | 348           | green            |                                 |
| 1725 | 2007        | 600        | female     | spawner         | 172           | green            |                                 |
| 1726 | 2007        | 620        | female     | spawner         | 359           | green            |                                 |
|      |             |            |            |                 |               |                  | Recap (tag<br>faded -<br>pink?) |
| 1727 | 2007        | 630        | female     | spawner         | 98            |                  |                                 |
| 1728 | 2007        | 630        | female     | spawner         | 347           | green            |                                 |
| 1729 | 2007        | 480        | male       | spawner         | 176           | green            |                                 |
| 1730 | 2007        | 510        | male       | spawner         | 341           | green            |                                 |
| 1731 | 2007        | 520        | male       | spawner         | 71            | green            |                                 |
| 1732 | 2007        | 530        | male       | spawner         | 124           | green            |                                 |
| 1733 | 2007        | 540        | male       | spawner         | 127           | green            |                                 |
| 1734 | 2007        | 540        | male       | spawner         | 146           | green            |                                 |
| 1735 | 2007        | 600        | male       | spawner         | 50            | green            |                                 |
| 1736 | 2007        | 620        | male       | spawner         | 236           | green            |                                 |
| 1737 | 2007        | 630        | male       | spawner         | 330           | green            |                                 |
| 1738 | 2007        | 310        |            | silver          | 16            | green            |                                 |
| 1739 | 2007        | 310        |            | silver          | 198           | green            |                                 |
| 1740 | 2007        | 310        |            | silver          | 321           | green            |                                 |
| 1741 | 2007        | 320        |            | silver          | 24            | green            |                                 |
| 1742 | 2007        | 320        |            | silver          | 277           | green            |                                 |
| 1743 | 2007        | 320        |            | silver          | 287           | green            |                                 |
| 1744 | 2007        | 320        |            | silver          | 310           | green            |                                 |
| 1745 | 2007        | 320        |            | silver          | 364           | green            |                                 |
| 1746 | 2007        | 320        |            | silver          | 401           | green            |                                 |
| 1747 | 2007        | 320        |            | silver          | 428           | green            |                                 |
| 1748 | 2007        | 330        |            | silver          | 10            | green            |                                 |
| 1749 | 2007        | 330        |            | silver          | 12            | green            |                                 |
| 1750 | 2007        | 330        |            | silver          | 34            | green            |                                 |
| 1751 | 2007        | 330        |            | silver          | 114           | green            |                                 |
| 1752 | 2007        | 330        |            | silver          | 173           | green            |                                 |
| 1753 | 2007        | 330        |            | silver          | 229           | green            |                                 |
| 1754 | 2007        | 330        |            | silver          | 237           | green            |                                 |
| 1755 | 2007        | 330        |            | silver          | 319           | green            |                                 |
| 1756 | 2007        | 330        |            | silver          | 323           | green            |                                 |
| 1757 | 2007        | 330        |            | silver          | 356           | green            |                                 |
| 1758 | 2007        | 330        |            | silver          | 367           | green            |                                 |
| 1759 | 2007        | 330        |            | silver          | 386           | green            |                                 |
| 1760 | 2007        | 330        |            | silver          | 398           | green            |                                 |
| 1761 | 2007        | 330        |            | silver          | 403           | green            |                                 |
| 1762 | 2007        | 330        |            | silver          | 418           | green            |                                 |
| 1763 | 2007        | 330        |            | silver          | 427           | green            |                                 |
| 1764 | 2007        | 330        |            | silver          | 438           | green            |                                 |
| 1765 | 2007        | 340        |            | silver          | 2             | green            |                                 |
| 1766 | 2007        | 340        |            | silver          | 26            | green            |                                 |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 1767 | 2007        | 340        |            | silver          | 55            | green            |              |
| 1768 | 2007        | 340        |            | silver          | 74            | green            |              |
| 1769 | 2007        | 340        |            | silver          | 160           | green            |              |
| 1770 | 2007        | 340        |            | silver          | 186           | green            |              |
| 1771 | 2007        | 340        |            | silver          | 252           | green            |              |
| 1772 | 2007        | 340        |            | silver          | 262           | green            |              |
| 1773 | 2007        | 340        |            | silver          | 269           | green            |              |
| 1774 | 2007        | 340        |            | silver          | 282           | green            |              |
| 1775 | 2007        | 340        |            | silver          | 284           | green            |              |
| 1776 | 2007        | 340        |            | silver          | 392           | green            |              |
| 1777 | 2007        | 340        |            | silver          | 399           | green            |              |
| 1778 | 2007        | 340        |            | silver          | 414           | green            |              |
| 1779 | 2007        | 340        |            | silver          | 425           | green            |              |
| 1780 | 2007        | 340        |            | silver          | 430           | green            |              |
| 1781 | 2007        | 350        |            | silver          | 23            | green            |              |
| 1782 | 2007        | 350        |            | silver          | 53            | green            |              |
| 1783 | 2007        | 350        |            | silver          | 84            | green            |              |
| 1784 | 2007        | 350        |            | silver          | 164           | green            |              |
| 1785 | 2007        | 350        |            | silver          | 202           | green            |              |
| 1786 | 2007        | 350        |            | silver          | 211           | green            |              |
| 1787 | 2007        | 350        |            | silver          | 248           | green            |              |
| 1788 | 2007        | 350        |            | silver          | 250           | green            |              |
| 1789 | 2007        | 350        |            | silver          | 253           | green            |              |
| 1790 | 2007        | 350        |            | silver          | 272           | green            |              |
| 1791 | 2007        | 350        |            | silver          | 275           | green            |              |
| 1792 | 2007        | 350        |            | silver          | 278           | green            |              |
| 1793 | 2007        | 350        |            | silver          | 279           | green            |              |
| 1794 | 2007        | 350        |            | silver          | 281           | green            |              |
| 1795 | 2007        | 350        |            | silver          | 288           | green            |              |
| 1796 | 2007        | 350        |            | silver          | 300           | green            |              |
| 1797 | 2007        | 350        |            | silver          | 320           | green            |              |
| 1798 | 2007        | 350        |            | silver          | 325           | green            |              |
| 1799 | 2007        | 350        |            | silver          | 334           | green            |              |
| 1800 | 2007        | 350        |            | silver          | 396           | green            |              |
| 1801 | 2007        | 350        |            | silver          | 431           | green            |              |
| 1802 | 2007        | 350        |            | silver          | 436           | green            |              |
| 1803 | 2007        | 350        |            | silver          | 440           | green            |              |
| 1804 | 2007        | 360        |            | silver          | 8             | green            |              |
| 1805 | 2007        | 360        |            | silver          | 11            | green            |              |
| 1806 | 2007        | 360        |            | silver          | 25            | green            |              |
| 1807 | 2007        | 360        |            | silver          | 31            | green            |              |
| 1808 | 2007        | 360        |            | silver          | 54            | green            |              |
| 1809 | 2007        | 360        |            | silver          | 102           | green            |              |
| 1810 | 2007        | 360        |            | silver          | 104           | green            |              |
| 1811 | 2007        | 360        |            | silver          | 148           | green            |              |
| 1812 | 2007        | 360        |            | silver          | 215           | green            |              |
| 1813 | 2007        | 360        |            | silver          | 219           | green            |              |
| 1814 | 2007        | 360        |            | silver          | 220           | green            |              |
| 1815 | 2007        | 360        |            | silver          | 222           | green            |              |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 1816 | 2007        | 360        |            | silver          | 232           | green            |              |
| 1817 | 2007        | 360        |            | silver          | 234           | green            |              |
| 1818 | 2007        | 360        |            | silver          | 239           | green            |              |
| 1819 | 2007        | 360        |            | silver          | 241           | green            |              |
| 1820 | 2007        | 360        |            | silver          | 263           | green            |              |
| 1821 | 2007        | 360        |            | silver          | 264           | green            |              |
| 1822 | 2007        | 360        |            | silver          | 265           | green            |              |
| 1823 | 2007        | 360        |            | silver          | 270           | green            |              |
| 1824 | 2007        | 360        |            | silver          | 286           | green            |              |
| 1825 | 2007        | 360        |            | silver          | 290           | green            |              |
| 1826 | 2007        | 360        |            | silver          | 293           | green            |              |
| 1827 | 2007        | 360        |            | silver          | 301           | green            |              |
| 1828 | 2007        | 360        |            | silver          | 302           | green            |              |
| 1829 | 2007        | 360        |            | silver          | 307           | green            |              |
| 1830 | 2007        | 360        |            | silver          | 315           | green            |              |
| 1831 | 2007        | 360        |            | silver          | 317           | green            |              |
| 1832 | 2007        | 360        |            | silver          | 324           | green            |              |
| 1833 | 2007        | 360        |            | silver          | 326           | green            |              |
| 1834 | 2007        | 360        |            | silver          | 329           | green            |              |
| 1835 | 2007        | 360        |            | silver          | 332           | green            |              |
| 1836 | 2007        | 360        |            | silver          | 340           | green            |              |
| 1837 | 2007        | 360        |            | silver          | 365           | green            |              |
| 1838 | 2007        | 360        |            | silver          | 387           | green            |              |
| 1839 | 2007        | 360        |            | silver          | 420           | green            |              |
| 1840 | 2007        | 360        |            | silver          | 423           | green            |              |
| 1841 | 2007        | 360        |            | silver          | 434           | green            |              |
| 1842 | 2007        | 360        |            | silver          | 435           | green            |              |
| 1843 | 2007        | 370        |            | silver          | 3             | green            |              |
| 1844 | 2007        | 370        |            | silver          | 15            | green            |              |
| 1845 | 2007        | 370        |            | silver          | 22            | green            |              |
| 1846 | 2007        | 370        |            | silver          | 27            | green            |              |
| 1847 | 2007        | 370        |            | silver          | 45            | green            |              |
| 1848 | 2007        | 370        |            | silver          | 115           | green            |              |
| 1849 | 2007        | 370        |            | silver          | 119           | green            |              |
| 1850 | 2007        | 370        |            | silver          | 217           | green            |              |
| 1851 | 2007        | 370        |            | silver          | 227           | green            |              |
| 1852 | 2007        | 370        |            | silver          | 231           | green            |              |
| 1853 | 2007        | 370        |            | silver          | 242           | green            |              |
| 1854 | 2007        | 370        |            | silver          | 255           | green            |              |
| 1855 | 2007        | 370        |            | silver          | 257           | green            |              |
| 1856 | 2007        | 370        |            | silver          | 271           | green            |              |
| 1857 | 2007        | 370        |            | silver          | 274           | green            |              |
| 1858 | 2007        | 370        |            | silver          | 285           | green            |              |
| 1859 | 2007        | 370        |            | silver          | 299           | green            |              |
| 1860 | 2007        | 370        |            | silver          | 306           | green            |              |
| 1861 | 2007        | 370        |            | silver          | 308           | green            |              |
| 1862 | 2007        | 370        |            | silver          | 312           | green            |              |
| 1863 | 2007        | 370        |            | silver          | 338           | green            |              |
| 1864 | 2007        | 370        |            | silver          | 358           | green            |              |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 1865 | 2007        | 370        |            | silver          | 375           | green            |              |
| 1866 | 2007        | 370        |            | silver          | 379           | green            |              |
| 1867 | 2007        | 370        |            | silver          | 391           | green            |              |
| 1868 | 2007        | 370        |            | silver          | 416           | green            |              |
| 1869 | 2007        | 370        |            | silver          | 421           | green            |              |
| 1870 | 2007        | 370        |            | silver          | 426           | green            |              |
| 1871 | 2007        | 370        |            | silver          | 437           | green            |              |
| 1872 | 2007        | 380        |            | silver          | 1             | green            |              |
| 1873 | 2007        | 380        |            | silver          | 41            | green            |              |
| 1874 | 2007        | 380        |            | silver          | 180           | green            |              |
| 1875 | 2007        | 380        |            | silver          | 205           | green            |              |
| 1876 | 2007        | 380        |            | silver          | 206           | green            |              |
| 1877 | 2007        | 380        |            | silver          | 238           | green            |              |
| 1878 | 2007        | 380        |            | silver          | 243           | green            |              |
| 1879 | 2007        | 380        |            | silver          | 251           | green            |              |
| 1880 | 2007        | 380        |            | silver          | 259           | green            |              |
| 1881 | 2007        | 380        |            | silver          | 280           | green            |              |
| 1882 | 2007        | 380        |            | silver          | 322           | green            |              |
| 1883 | 2007        | 380        |            | silver          | 337           | green            |              |
| 1884 | 2007        | 380        |            | silver          | 342           | green            |              |
| 1885 | 2007        | 380        |            | silver          | 345           | green            |              |
| 1886 | 2007        | 380        |            | silver          | 395           | green            |              |
| 1887 | 2007        | 390        |            | silver          | 21            | green            |              |
| 1888 | 2007        | 390        |            | silver          | 196           | green            |              |
| 1889 | 2007        | 390        |            | silver          | 226           | green            |              |
| 1890 | 2007        | 390        |            | silver          | 244           | green            |              |
| 1891 | 2007        | 390        |            | silver          | 247           | green            |              |
| 1892 | 2007        | 390        |            | silver          | 256           | green            |              |
| 1893 | 2007        | 390        |            | silver          | 267           | green            |              |
| 1894 | 2007        | 390        |            | silver          | 370           | green            |              |
| 1895 | 2007        | 390        |            | silver          | 397           | green            |              |
| 1896 | 2007        | 390        |            | silver          | 439           | green            |              |
| 1897 | 2007        | 400        |            | silver          | 108           | green            |              |
| 1898 | 2007        | 400        |            | silver          | 128           | green            |              |
| 1899 | 2007        | 400        |            | silver          | 132           | green            |              |
| 1900 | 2007        | 400        |            | silver          | 169           | green            |              |
| 1901 | 2007        | 400        |            | silver          | 212           | green            |              |
| 1902 | 2007        | 400        |            | silver          | 266           | green            |              |
| 1903 | 2007        | 400        |            | silver          | 316           | green            |              |
| 1904 | 2007        | 400        |            | silver          | 406           | green            |              |
| 1905 | 2007        | 410        |            | silver          | 20            | green            |              |
| 1906 | 2007        | 410        |            | silver          | 33            | green            |              |
| 1907 | 2007        | 410        |            | silver          | 52            | green            |              |
| 1908 | 2007        | 410        |            | silver          | 61            | green            |              |
| 1909 | 2007        | 410        |            | silver          | 86            | green            |              |
| 1910 | 2007        | 410        |            | silver          | 91            | green            |              |
| 1911 | 2007        | 410        |            | silver          | 93            | green            |              |
| 1912 | 2007        | 410        |            | silver          | 96            | green            |              |
| 1913 | 2007        | 410        |            | silver          | 131           | green            |              |

|      | Year | Lth | Sex | Maturity | Tag No  | Tag Color | Notes |
|------|------|-----|-----|----------|---------|-----------|-------|
| 1914 | 2007 | 410 |     | silver   | 179     | green     |       |
| 1915 | 2007 | 410 |     | silver   | 200     | green     |       |
| 1916 | 2007 | 410 |     | silver   | 366     | green     |       |
| 1917 | 2007 | 410 |     | silver   | 380     | green     |       |
| 1918 | 2007 | 410 |     | silver   | 393     | green     |       |
| 1919 | 2007 | 410 |     | silver   | 409     | green     |       |
| 1920 | 2007 | 410 |     | silver   | 415     | green     |       |
| 1921 | 2007 | 410 |     | silver   | 419     | green     |       |
| 1922 | 2007 | 410 |     | silver   | 422     | green     |       |
| 1923 | 2007 | 420 |     | silver   | 30      | green     |       |
| 1924 | 2007 | 420 |     | silver   | 36      | green     |       |
| 1925 | 2007 | 420 |     | silver   | 44      | green     |       |
| 1926 | 2007 | 420 |     | silver   | 90      | green     |       |
| 1927 | 2007 | 420 |     | silver   | 92      | green     |       |
| 1928 | 2007 | 420 |     | silver   | 150     | green     |       |
| 1929 | 2007 | 420 |     | silver   | 171     | green     |       |
| 1930 | 2007 | 420 |     | silver   | 175     | green     |       |
| 1931 | 2007 | 420 |     | silver   | 188     | green     |       |
| 1932 | 2007 | 420 |     | silver   | 249     | green     |       |
| 1933 | 2007 | 420 |     | silver   | 254     | green     |       |
| 1934 | 2007 | 420 |     | silver   | 260     | green     |       |
| 1935 | 2007 | 420 |     | silver   | 313     | green     |       |
| 1936 | 2007 | 420 |     | silver   | 318     | green     |       |
| 1937 | 2007 | 420 |     | silver   | 350     | green     |       |
| 1938 | 2007 | 430 |     | silver   | 7       | green     |       |
| 1939 | 2007 | 430 |     | silver   | 19      | green     |       |
| 1940 | 2007 | 430 |     | silver   | 35      | green     |       |
| 1941 | 2007 | 430 |     | silver   | 62      | green     |       |
| 1942 | 2007 | 430 |     | silver   | 103     | green     |       |
| 1943 | 2007 | 430 |     | silver   | 122     | green     |       |
| 1944 | 2007 | 430 |     | silver   | 152     | green     |       |
| 1945 | 2007 | 430 |     | silver   | 154     | green     |       |
| 1946 | 2007 | 430 |     | silver   | 155     | green     |       |
| 1947 | 2007 | 430 |     | silver   | 162     | green     |       |
| 1948 | 2007 | 430 |     | silver   | 174     | green     |       |
| 1949 | 2007 | 430 |     | silver   | 224     | green     |       |
| 1950 | 2007 | 430 |     | silver   | 240     | green     |       |
| 1951 | 2007 | 430 |     | silver   | 292     | green     |       |
| 1952 | 2007 | 430 |     | silver   | 304     | green     |       |
| 1953 | 2007 | 430 |     | silver   | 311     | green     |       |
| 1954 | 2007 | 430 |     | silver   | 351     | green     |       |
| 1955 | 2007 | 430 |     | silver   | 360     | green     |       |
| 1956 | 2007 | 430 |     | silver   | 369     | green     |       |
| 1957 | 2007 | 430 |     | silver   | 383     | green     |       |
| 1958 | 2007 | 430 |     | silver   | 385     | green     |       |
| 1959 | 2007 | 430 |     | silver   | 410     | green     |       |
| 1960 | 2007 | 430 |     | silver   | 429     | green     |       |
| 1961 | 2007 | 430 |     | silver   | 412/413 | green     |       |
| 1962 | 2007 | 440 |     | silver   | 39      | green     |       |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 1963 | 2007        | 440        |            | silver          | 40            | green            |              |
| 1964 | 2007        | 440        |            | silver          | 43            | green            |              |
| 1965 | 2007        | 440        |            | silver          | 63            | green            |              |
| 1966 | 2007        | 440        |            | silver          | 79            | green            |              |
| 1967 | 2007        | 440        |            | silver          | 95            | green            |              |
| 1968 | 2007        | 440        |            | silver          | 123           | green            |              |
| 1969 | 2007        | 440        |            | silver          | 138           | green            |              |
| 1970 | 2007        | 440        |            | silver          | 140           | green            |              |
| 1971 | 2007        | 440        |            | silver          | 166           | green            |              |
| 1972 | 2007        | 440        |            | silver          | 167           | green            |              |
| 1973 | 2007        | 440        |            | silver          | 170           | green            |              |
| 1974 | 2007        | 440        |            | silver          | 218           | green            |              |
| 1975 | 2007        | 440        |            | silver          | 223           | green            |              |
| 1976 | 2007        | 440        |            | silver          | 245           | green            |              |
| 1977 | 2007        | 440        |            | silver          | 294           | green            |              |
| 1978 | 2007        | 440        |            | silver          | 357           | green            |              |
| 1979 | 2007        | 440        |            | silver          | 361           | green            |              |
| 1980 | 2007        | 440        |            | silver          | 372           | green            |              |
| 1981 | 2007        | 440        |            | silver          | 374           | green            |              |
| 1982 | 2007        | 440        |            | silver          | 432           | green            |              |
| 1983 | 2007        | 450        |            | silver          | 4             | green            |              |
| 1984 | 2007        | 450        |            | silver          | 14            | green            |              |
| 1985 | 2007        | 450        |            | silver          | 72            | green            |              |
| 1986 | 2007        | 450        |            | silver          | 99            | green            |              |
| 1987 | 2007        | 450        |            | silver          | 101           | green            |              |
| 1988 | 2007        | 450        |            | silver          | 110           | green            |              |
| 1989 | 2007        | 450        |            | silver          | 112           | green            |              |
| 1990 | 2007        | 450        |            | silver          | 143           | green            |              |
| 1991 | 2007        | 450        |            | silver          | 145           | green            |              |
| 1992 | 2007        | 450        |            | silver          | 151           | green            |              |
| 1993 | 2007        | 450        |            | silver          | 158           | green            |              |
| 1994 | 2007        | 450        |            | silver          | 192           | green            |              |
| 1995 | 2007        | 450        |            | silver          | 195           | green            |              |
| 1996 | 2007        | 450        |            | silver          | 203           | green            |              |
| 1997 | 2007        | 450        |            | silver          | 268           | green            |              |
| 1998 | 2007        | 450        |            | silver          | 314           | green            |              |
| 1999 | 2007        | 450        |            | silver          | 352           | green            |              |
| 2000 | 2007        | 450        |            | silver          | 373           | green            |              |
| 2001 | 2007        | 450        |            | silver          | 388           | green            |              |
| 2002 | 2007        | 460        |            | silver          | 37            | green            |              |
| 2003 | 2007        | 460        |            | silver          | 57            | green            |              |
| 2004 | 2007        | 460        |            | silver          | 65            | green            |              |
| 2005 | 2007        | 460        |            | silver          | 68            | green            |              |
| 2006 | 2007        | 460        |            | silver          | 70            | green            |              |
| 2007 | 2007        | 460        |            | silver          | 106           | green            |              |
| 2008 | 2007        | 460        |            | silver          | 135           | green            |              |
| 2009 | 2007        | 460        |            | silver          | 157           | green            |              |
| 2010 | 2007        | 460        |            | silver          | 165           | green            |              |
| 2011 | 2007        | 460        |            | silver          | 178           | green            |              |



|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 2012 | 2007        | 460        |            | silver          | 185           | green            |              |
| 2013 | 2007        | 460        |            | silver          | 190           | green            |              |
| 2014 | 2007        | 460        |            | silver          | 194           | green            |              |
| 2015 | 2007        | 460        |            | silver          | 258           | green            |              |
| 2016 | 2007        | 460        |            | silver          | 303           | green            |              |
| 2017 | 2007        | 460        |            | silver          | 377           | green            |              |
| 2018 | 2007        | 460        |            | silver          | 384           | green            |              |
| 2019 | 2007        | 460        |            | silver          | 394           | green            |              |
| 2020 | 2007        | 460        |            | silver          | 424           | green            |              |
| 2021 | 2007        | 470        |            | silver          | 28            | green            |              |
| 2022 | 2007        | 470        |            | silver          | 87            | green            |              |
| 2023 | 2007        | 470        |            | silver          | 89            | green            |              |
| 2024 | 2007        | 470        |            | silver          | 94            | green            |              |
| 2025 | 2007        | 470        |            | silver          | 120           | green            |              |
| 2026 | 2007        | 470        |            | silver          | 129           | green            |              |
| 2027 | 2007        | 470        |            | silver          | 137           | green            |              |
| 2028 | 2007        | 470        |            | silver          | 141           | green            |              |
| 2029 | 2007        | 470        |            | silver          | 149           | green            |              |
| 2030 | 2007        | 470        |            | silver          | 187           | green            |              |
| 2031 | 2007        | 470        |            | silver          | 343           | green            |              |
| 2032 | 2007        | 480        |            | silver          | 161           | green            |              |
| 2033 | 2007        | 480        |            | silver          | 193           | green            |              |
| 2034 | 2007        | 480        |            | silver          | 216           | green            |              |
| 2035 | 2007        | 480        |            | silver          | 389           | green            |              |
| 2036 | 2007        | 490        |            | silver          | 38            | green            |              |
| 2037 | 2007        | 490        |            | silver          | 109           | green            |              |
| 2038 | 2007        | 490        |            | silver          | 235           | green            |              |
| 2039 | 2007        | 500        |            | silver          | 126           | green            |              |
| 2040 | 2007        | 510        |            | silver          | 142           | green            |              |
| 2041 | 2007        | 520        |            | silver          | 59            | green            |              |
| 2042 | 2007        | 520        |            | silver          | 60            | green            |              |
| 2043 | 2007        | 520        |            | silver          | 73            | green            |              |
| 2044 | 2007        | 520        |            | silver          | 116           | green            |              |
| 2045 | 2007        | 520        |            | silver          | 336           | green            |              |
| 2046 | 2007        | 530        |            | silver          | 13            | green            |              |
| 2047 | 2007        | 530        |            | silver          | 85            | green            |              |
| 2048 | 2007        | 530        |            | silver          | 113           | green            |              |
| 2049 | 2007        | 530        |            | silver          | 134           | green            |              |
| 2050 | 2007        | 530        |            | silver          | 153           | green            |              |
| 2051 | 2007        | 530        |            | silver          | 163           | green            |              |
| 2052 | 2007        | 540        |            | silver          | 182           | green            |              |
| 2053 | 2007        | 550        |            | silver          | 107           | green            |              |
| 2054 | 2007        | 560        |            | silver          | 82            | green            |              |
| 2055 | 2007        | 560        |            | silver          | 111           | green            |              |
| 2056 | 2007        | 560        |            | silver          | 136           | green            |              |
| 2057 | 2007        | 570        |            | silver          | 207           | green            |              |
| 2058 | 2007        | 590        |            | silver          | 295           | green            |              |
| 2059 | 2007        | 610        |            | silver          | 56            | green            |              |
| 2060 | 2007        | 610        |            | silver          | 296           | green            |              |

|      | <b>Year</b> | <b>Lth</b> | <b>Sex</b> | <b>Maturity</b> | <b>Tag No</b> | <b>Tag Color</b> | <b>Notes</b> |
|------|-------------|------------|------------|-----------------|---------------|------------------|--------------|
| 2061 | 2007        | 620        |            | silver          | 297           | green            |              |
| 2062 | 2007        | 620        |            | silver          | 298           | green            |              |
| 2063 | 2007        | 630        |            | silver          | 117           | green            |              |