

**The Refuge Effect of Unpublished Artificial Reefs
Deployed on the Northwest Florida Shelf:
Year 1 Final Report (Grant FWC-04032)**

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Introduction

Artificial reefs have been constructed of a variety of materials in marine, estuarine, and freshwater habitats around the world for myriad purposes (Seaman and Sprague 1991). Among the more common stated goals of artificial reef programs are 1) mitigating losses of structurally complex or hardbottom habitat; 2) enhancing production of reef-dependent invertebrate or fish species; 3) aggregating individuals to increase fishing efficiency; and, 4) providing divers with increased opportunity to view reef-associated organisms (Seaman 2000; Baine 2001; Okechi and Polovina 1995). While resource managers often cite more than one goal for a given artificial reef program, recreational and commercial fishers generally are among the most vocal proponents of artificial reefs because increased catch rates often follow reef creation (Bohnsack 1989; Lindberg 1997; Grossman et al. 1997; Bortone 1998). This increase in catch rates is the subject of an ongoing debate among fishery biologists and managers as to whether artificial reefs enhance production of reef fishes or merely attract fishes from surrounding areas, thus making them more vulnerable to fishing mortality (i.e., the attraction versus production debate) (Bohnsack 1989; Lindberg 1997; Pickering and Whitmarsh 1997). This issue is especially important in the northern Gulf of Mexico (Gulf) where many large reef fishes (e.g., snappers and groupers) targeted at artificial reefs are estimated to be fully exploited or overfished (NOAA 2003; Patterson and Cowan 2003). Therefore, concern exists that creation of artificial reefs actually may exacerbate unsustainable levels of fishing mortality if artificial reefs function more as reef fish attractants and not as production enhancers (Polivina 1989,1991; Grossman et al. 1997; Pitcher and Seaman 2000).

Artificial reefs began to be used widely as management tools in the United States (US) during the 1970s and 1980s (Bohnsack and Sutherland 1985; Bohnsack 1989; Lindberg 1997; Seaman and Jensen 2000), although some states have had active programs for many decades (Stone 1986; Minton and Heath 1998). Lindberg (1997) suggested fishers and managers assumed artificial reefs deployed in these early programs increased production of fish stocks due to the simple fact that high fish densities and high catch rates were observed at artificial reefs, sometimes where little or no reef fish catch previously was taken. Lindberg (1997) also opined that anglers readily accepted the assumption that artificial reefs increased fish production because it was compatible with their conservation ethic. Bohnsack and Sutherland (1985) were among the first scientists to question whether artificial reefs generally increased fish production or merely aggregated fishes from surrounding natural hardbottom habitats. They suggested a greater understanding was needed of how artificial reefs effect fish populations and marine ecosystems prior to their mass deployment. Nearly 20 years later, scientists still comment that research on the ecological function of artificial reefs lags far behind the engineering and deployment of reefs (Pickering and Whitmarsh 1997; Lindberg 2000; Miller 2002).

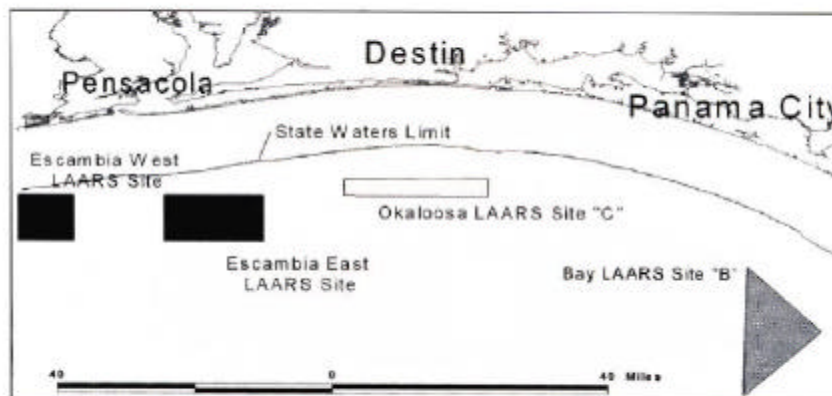
Managers and scientists in the state of Florida have long been leaders in both the development and study of artificial reefs. Florida has the most extensive natural reef habitat in the continental US and, therefore, the greatest diversity and abundance of reef fishes (Hoese and Moore 1998). Florida also has the most comprehensive artificial reef program in the nation. Much of what is known about the ecological function of artificial reefs has resulted from studies conducted on the Florida shelf; however, we still lack fundamental knowledge of how artificial reefs function in many places (Lindberg 2000; Miller 2002). In the recently written Florida Artificial Reef Strategic Plan (ARSP), the Florida Fish and Wildlife Conservation Commission

(FWC) emphasized the need to increase the knowledge base of artificial reef ecology in order to achieve the guiding purpose:

“To optimize the biological and economic benefits of artificial reefs in Florida to ensure that the marine environment, human health and marine organisms are protected, restored, enhanced or sustained...” (FWC 2003).

Following the spirit of the ARSP, the FWC deployed over 500 unpublished artificial reef sites for scientific studies of artificial reef ecology in four Large Area Artificial Reef Sites (LAARS) in the northwest Gulf of Mexico (Gulf) (Fig. 1). Here, we report results from the first year of a three-year, process-oriented study examining reef fish community structure and population dynamics (e.g., recruitment, site fidelity, growth, and mortality) at replicate reefs of three designs located in the Escambia East LAARS. In this multidisciplinary study, we are employing a variety of research techniques and mathematical models to estimate community structure and quantify differences in population dynamics parameters among reef types and experimental treatments. In the first year of the study our goal has been to establish baseline community structure estimates via video sampling by extending the usage of a well-established reef fish sampling method to include video collected with a remotely operated vehicle (ROV) (Bohnsack and Bannerot 1986). This technique is being applied to estimate community structure and fish abundance, as well as population dynamics (ie., recruitment, growth, and mortality) at artificial reefs (Bohnsack and Bannerot 1986; Moser et al. 1998; Stanley and Wilson 1990,199 1). Additionally, fishes captured at a subset of experimental reefs were tagged with external anchor tags to estimate site fidelity to and dispersion from reefs. Tagging data also will be used to evaluate if the assumption is met that unpublished reef sites are not located and targeted by fishers. In the third year of the study, a second experiment will consist of widely advertising the global positioning system (GPS) coordinates of a subset of reefs. We then will estimate the effect of fishing on community structure, dominance, and diversity, as well as the size distribution of fishes. Last, various mathematical models will be applied to the tagging and community structure data to estimate the ecological function of study reefs (see below for methodological details). Specifically, we will estimate species- and reef-specific production values and test if reefs (both fished and unfished) increase fish production or serve as net sinks of production.

Figure 1. Map of the locations of the four LAARS created on the northwest Florida shelf.

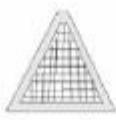




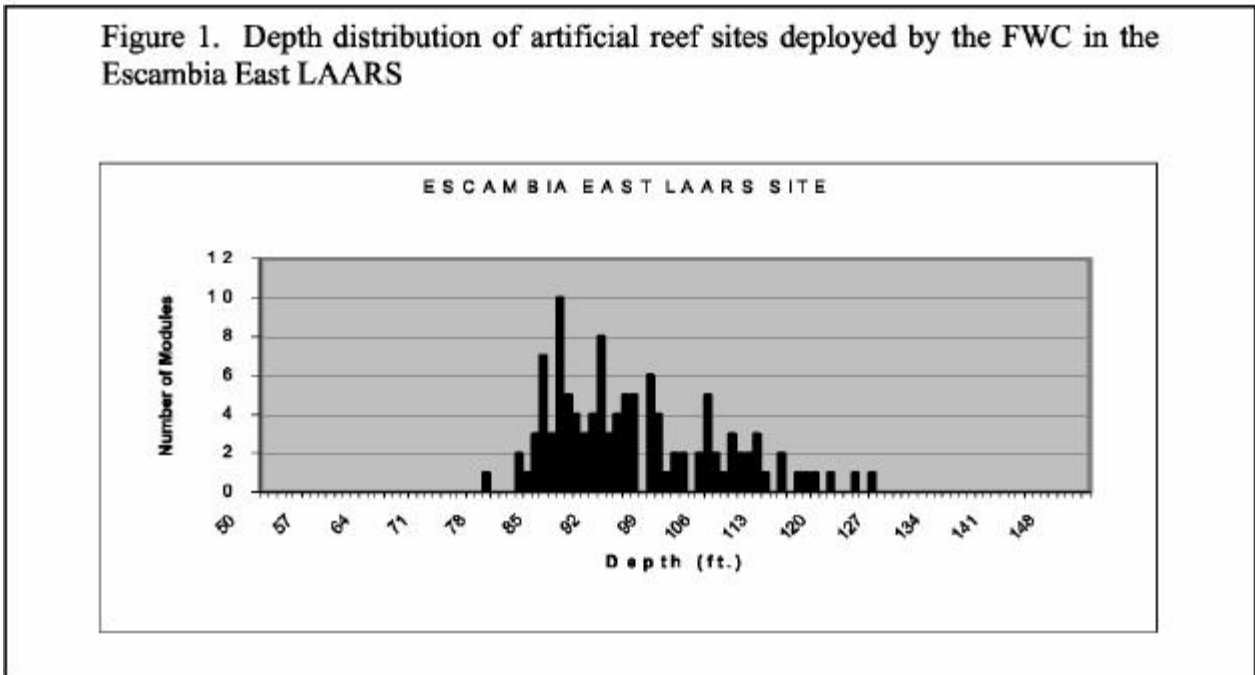
Approach and Methodology

Site Selection:

Deployment locations of reef sites used in this study were provided by Mr. Keith Mille of the FWC, Division of Marine Fisheries Management. Reefs were of three designs (Table 1) and our goal was to randomly select 3 reefs of each design in each of three depth strata (strata-1 = < 90 ft, strata-2 = 90 – 105 ft, and strata-3 = > 105 ft) within the Escambia East LAARS (Fig. 2). Reefs of a given type in a given stratum were numbered and 3 reefs of each type were randomly selected from each stratum with a random number table (n = 3 strata x 3 reef types x 3 reefs per stratum = 27 reefs). Coordinates of several other reefs of each design were available in the case selected sites could not be located.

Table 1. Dimensions of three artificial reef types deployed by the FWC in the Escambia East LAARS prior to start of this study.

Reef Parameters	 Type A	 Type B	 Type C
modules per site	1	2	2
module height m	3.05	1.83	1.45
module base m	3.05	3.05	1.83
module volume m ³	4.09	4.90	2.84



Video Sampling:

All video sampling was conducted onboard the chartered *F/V Dorado* which is owned and operated by Captain Jeff Thierry. Video sampling was performed with a VideoRay Pro III ROV piloted at the surface by Mr. Mike Dance. The ROV was controlled by an integrated control box via the ROV's tether to the surface. Realtime ROV movement was observed on a high resolution monitor with a live feed from the ROV's 570-line resolution video camera. The camera is capable of 160° vertical tilt and has a wide-focus range (108°); lighting when needed was provided by twin 20-watt high efficiency halogen lights mounted on the ROV. Video output from the ROV was recorded on digital video tape with a Sony GVD 1000 digital VCR.

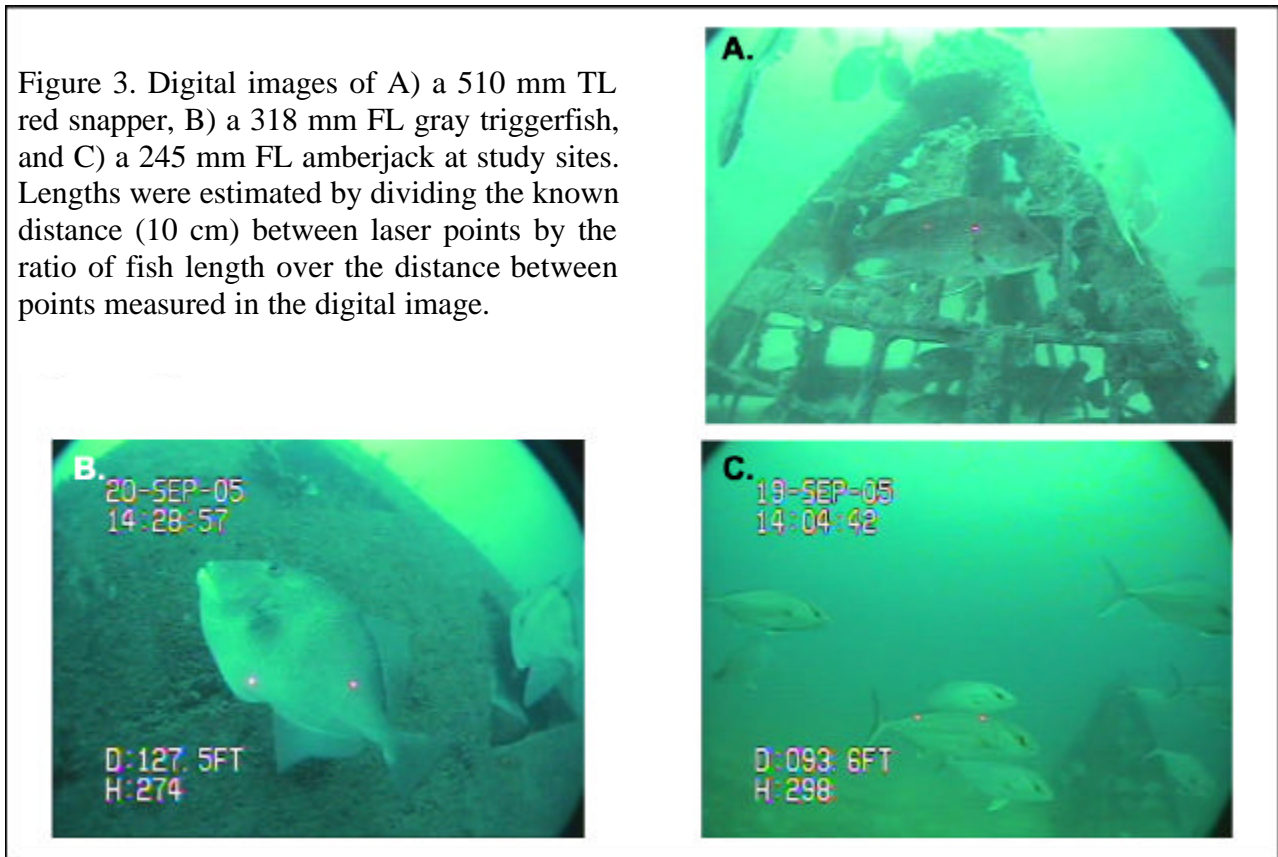
Initial inspection of sampling sites was conducted on November 23 and November 29, 2004 (Table 2). (Note: Tables 2-14 are in an appendix at the end of the report.) Inspection methods included going to coordinates provided by FWC for our selected sites and searching for reefs on the seafloor with the *Dorado*'s Foruno FCV667 dual frequency bottom machine. If no bottom features were located at the coordinates provided, we searched in a cloverleaf pattern for up to 20 ha until a feature was located. If no feature was located within that area, we set anchor such that the *Dorado* was positioned over the FWC coordinates and then we flew the ROV down to inspect the seafloor. When a feature was located with the bottom machine, we flew the ROV to the seafloor to inspect whether the feature was a FWC reef. We videoed reef sites and determined if both modules were present for B- and C-type reefs. If the second site was not seen while searching a radius of approximately 30 m with the ROV on the seafloor, we returned the ROV to the boat and searched with the bottom machine as described above.

The goal of inspection efforts was to perform inspections of all 27 randomly selected reefs and to replace any reefs not found with other sites. Delays in inspection sampling occurred, however, that precluded completion of all inspections in November 2004. First, UWF personnel used the wrong set of coordinates provided by Mr. Mille for all C-type reefs, thus none were located initially. A further delay was caused by poor deployment or post-deployment movement of B-type modules. Only a few B-type reefs visited during the first year of the study were located near their deployment coordinates. Furthermore, most pairs of modules that constitute individual sites are not sited next to one another (see below).

Video sampling of fishes at study sites began in December 2004 (Tables 3-5). Sample sites visited in December were the 27 sites randomly selected for inclusion as study reefs. Initial video inspection was conducted along with video sampling for sites that had not yet been visited (all C-type reefs, B3, B4, B7, A19 and A20). Video sampling also was conducted in March (winter quarter), June (spring quarter), and September (fall quarter) 2005 (Tables 3-5). Immediately after video sampling at a subset of reef sites, a Sea Bird 1 *9plus* conductivity, temperature, depth (CTD) instrument equipped with a dissolved oxygen sensor was lowered to the seafloor to measure water parameters. Following June 2005 sampling, UWF's Sea Bird 1 *9plus* CTD was sent to Sea Bird Electronics to have its annual cleaning and recalibration. Sea Bird technicians discovered anomalies in data files we sent them from CTD casts made during 2004-05 that, for the time being, make CTD data collected in fall, winter, and spring quarters unusable. SeaBird technicians believe the CTD data can be corrected retrospectively, but at this time we do not have an algorithm to do so. During September 2005 sampling, we were able to measure dissolved oxygen, salinity, and temperature 1 m above the seafloor with a YSI, Inc. 85 dissolved oxygen, conductivity, salinity, and temperature sensor. Water samples first were collected from 1 m above the seafloor with a Van Dorn bottle and then analyzed at the surface with the YSI sensor. Data from those samples are reported in this report; data from winter

through spring quarters will be reported in a year two report when we are able to retrospectively correct those CTD casts. (Note: UWF's CTD is due to be recalibrated and returned prior to Fall 2005 field sampling.)

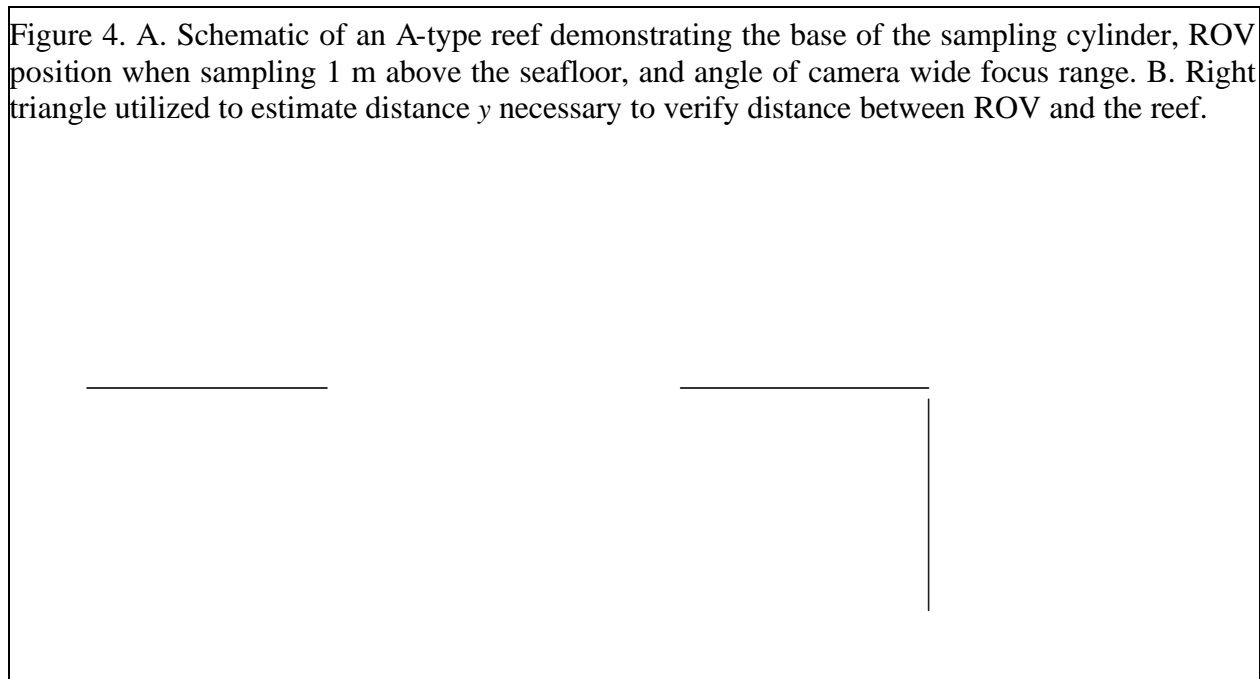
Video sampling of reef fish communities at study sites involved modification of an established stationary count method proposed by Bohnsack and Bannerot (1986) in which a diver identifies and enumerates all fishes within a 15-m diameter cylinder from the seafloor (or reef) to the surface. In our method, the ROV first is positioned 1 m above the seafloor and approximately 5 m away from a given reef. The ROV slowly is pivoted 360° and then moved to the opposite side of the reef. Once there, it is positioned 1 m above the seafloor and 5 m away from the reef and is pivoted 360°. The ROV then is flown to 1 m directly above the reef and pivoted 360° to video fishes in the water column above the reef. Next, the ROV is flown to ~10 m above the reef and pivoted 360°. Once completed, the ROV is flown back down to the reef and positioned such that fishes inside the reef structure can be videotaped. The entire sampling video sampling procedure can be accomplished in < 10 minutes. Following video sampling, the ROV is flown among the fishes present in an attempt to target as many as possible with the laser guides to estimate fish size distribution; distance between red lasers is fixed at 10 cm to estimate fish length (Figure 3).



It is apparent that for our cylinder sampling method to be successful we must be able to estimate accurately the distance the ROV is from a given reef. For an A-type reef (Fig. 4), the distance the ROV is away from the reef can be estimated by the percentage of the video frame the base of the reef fills. The base of an A-type module is approximately 3 m in width. The distance we

want between the center of the ROV and the reef is 5 m. The distance y shown in figure 4B is the unknown distance between the edge of the field of view (108°) and the radius from the center of the reef (center of cylinder) that is perpendicular to the straight line between the reef and the ROV. The angles of the resulting right triangle are known to be 90° , 54° , and 36° because 108° (total focus range angle) divided by two equals 54° , and 90° (remaining degrees in triangle once the right angle is accounted for) minus 54° equals 36° . The tangent of 36° equals the distance between the ROV and the reef center divided by the unknown distance y . If the ROV is 5 m away from the reef center, then y equals 6.9 m. By multiplying 6.9 by two, we can estimate the total distance in the reef's plane that is in view when the ROV is 5 m away from it. Thus, when the ROV is 5 m away from the center of the reef, the distance across the field of view is ~ 14 m. Since the base of the reef is ~ 3 m wide, it will fill $\sim 20\%$ of the distance across the field of view when the ROV is 5 m from it. Therefore, whoever is flying the ROV can position it ~ 5 m from the reef in the above example if the reef base fills approximately 20% of the field of view. This procedure can easily accommodate reef sites with multiple modules by simply estimating the distance between modules, which is straightforward because the module dimensions are known (Table 1).

Figure 4. A. Schematic of an A-type reef demonstrating the base of the sampling cylinder, ROV position when sampling 1 m above the seafloor, and angle of camera wide focus range. B. Right triangle utilized to estimate distance y necessary to verify distance between ROV and the reef.



Video Analysis

Analysis of video samples was performed in the Fisheries Laboratory at UWF. Digital video was uploaded to an Apple PowerMac G5 dual processor computer equipped with a 23 inch high definition flat panel monitor. Uploaded video first was archived on DVD. The primary video analyst was Mike Dance, with Will Patterson analyzing 10% of video samples for quality control. For a given video sample, fishes were identified to the lowest taxon possible and enumerated for five separate video segments: 1st spin 1 m above seafloor, 2nd spin 1 m above seafloor, spin 1 m above reef, spin 10 m above reef, and inside reef. To avoid double counting, fish observed during the 1st and 2nd spins were counted as part of the respective spin's sampling segment only from the ROV side of a plane running through the reef and perpendicular to the

line running from the ROV to the reef (i.e., perpendicular to the ROV heading when the ROV was pointed directly toward the center of the reef). Fish numbers were summed across all five sampling segments for a total count. Differences between reader estimates were evaluated by computing the average percent error (APE) for each species at a given site, as well as the overall APE among all species seen at a given site. Average percent error between reader counts for a given species was computed as:

$$\text{APE} = 100 \times \left(\frac{1}{n} \times \left(\frac{\text{ABS}(R1 - \text{mean})}{\text{mean}} + \frac{\text{ABS}(R2 - \text{mean})}{\text{mean}} \right) \right)$$

where:

n = number of readers

ABS = absolute value

R1 = count from reader 1

R2 = count from reader 2

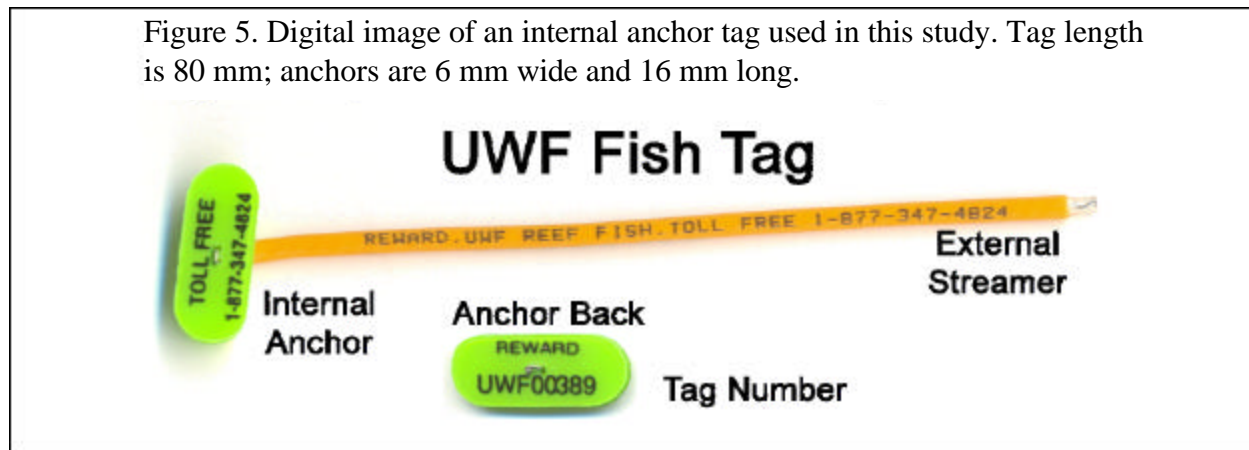
mean = average count between readers.

Average percent error among all species at a given site was estimated by taking the mean of the species-specific APEs. Quarterly APE among all sites was computed as the mean of all site APEs. Annual APE was computed as the mean of quarterly APEs.

Reef Fish Tagging:

Sampling trips were taken onboard the *F/V Dorado* in March and June 2005 to tag fishes captured with hook and line at nine of our reef sites (Tables 3-5). At a given site four fishermen fished with two-hook bottom rigs (3/0 J hooks) baited with squid and cut mackerel, and one fisherman fished in the water column over the reef with a whole mackerel scad on a sow rig. Sow rigs are made by snelling two 5/0 J hooks to the end of a 1.5 m leader at a space of about 10 cm apart. Fish were brought to the surface with at a rate of $\sim 1 \text{ m sec}^{-1}$. Fish were removed from hooks and placed in a 500 quart cooler with flowing seawater prior to tagging. Fishes were measured to the nearest mm fork length (FL) or total length (TL), tagged with Floy[®] 95M internal anchor tag, and returned overboard. Tags are marked with the word “REWARD”, a number identifying the fish, and a toll free telephone number to report tag recoveries (Fig. 5). The tagging study has been widely advertised among recreational and commercial fishing groups to encourage reporting of tag recoveries (see poster that has been widely circulated among northern Gulf fishing communities at end of Appendix). Fishers who report tags receive a \$5 reward per tag and are entered into a \$500 annual drawing of all tag returners.

Figure 5. Digital image of an internal anchor tag used in this study. Tag length is 80 mm; anchors are 6 mm wide and 16 mm long.

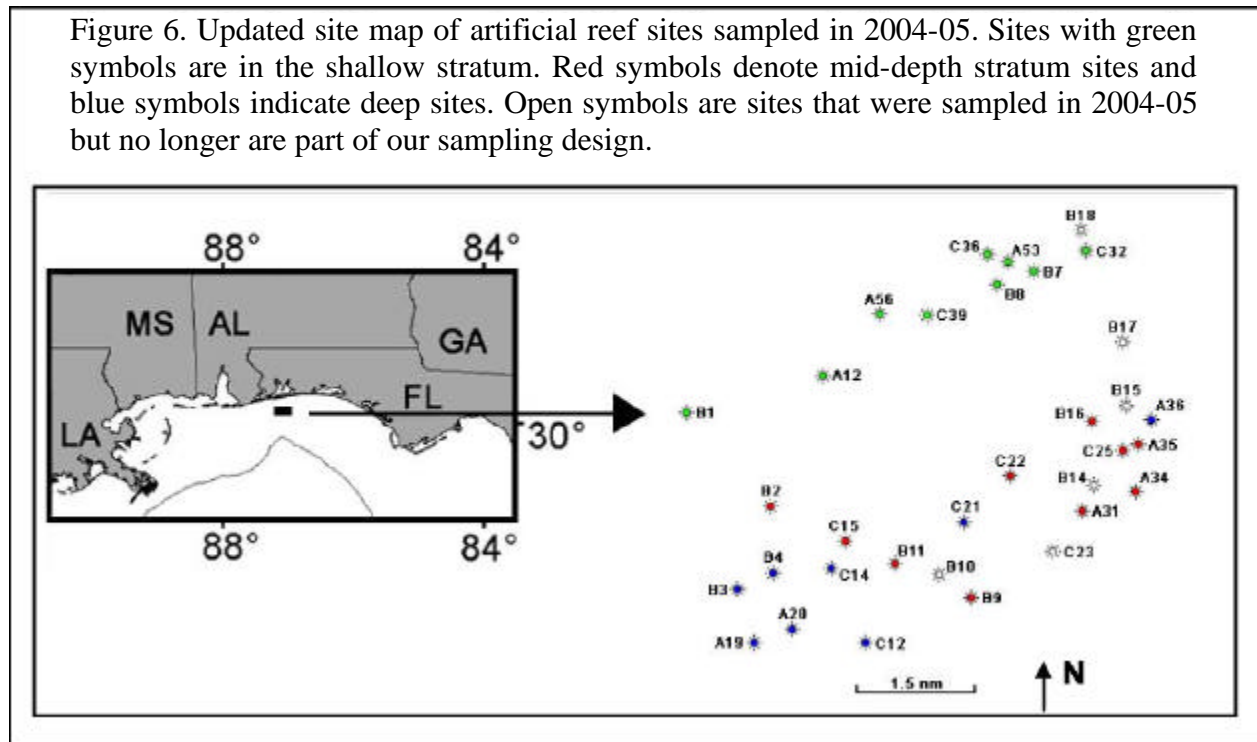


Condition of fish at release was evaluated qualitatively. Fish that swam down vigorously were given condition- 1. Fish in condition-2 oriented toward the bottom but did not swim down vigorously. Fish in condition-3 remained at the surface but were obviously alive. Condition-4 fish remained motionless at the surface and appeared dead.

Results

Site Selection and Condition

All of the nine randomly selected A-type reefs were found easily and continue to be used as sample sites (Appendix Tables 3, 6). Of the C-type reefs originally selected, site C23 was replaced with site C25 in March 2005 due to the poor condition of C23 (Tables 4, 6). We conducted extensive sampling in March 2005 to find replacement sites for many of the originally selected B-type reefs (Tables 5, 6). As a result, five of the original B-type reefs were replaced by other sites. A total of 33 different reef sites was sampled from December 2004 through June 2005 (Fig. 6).



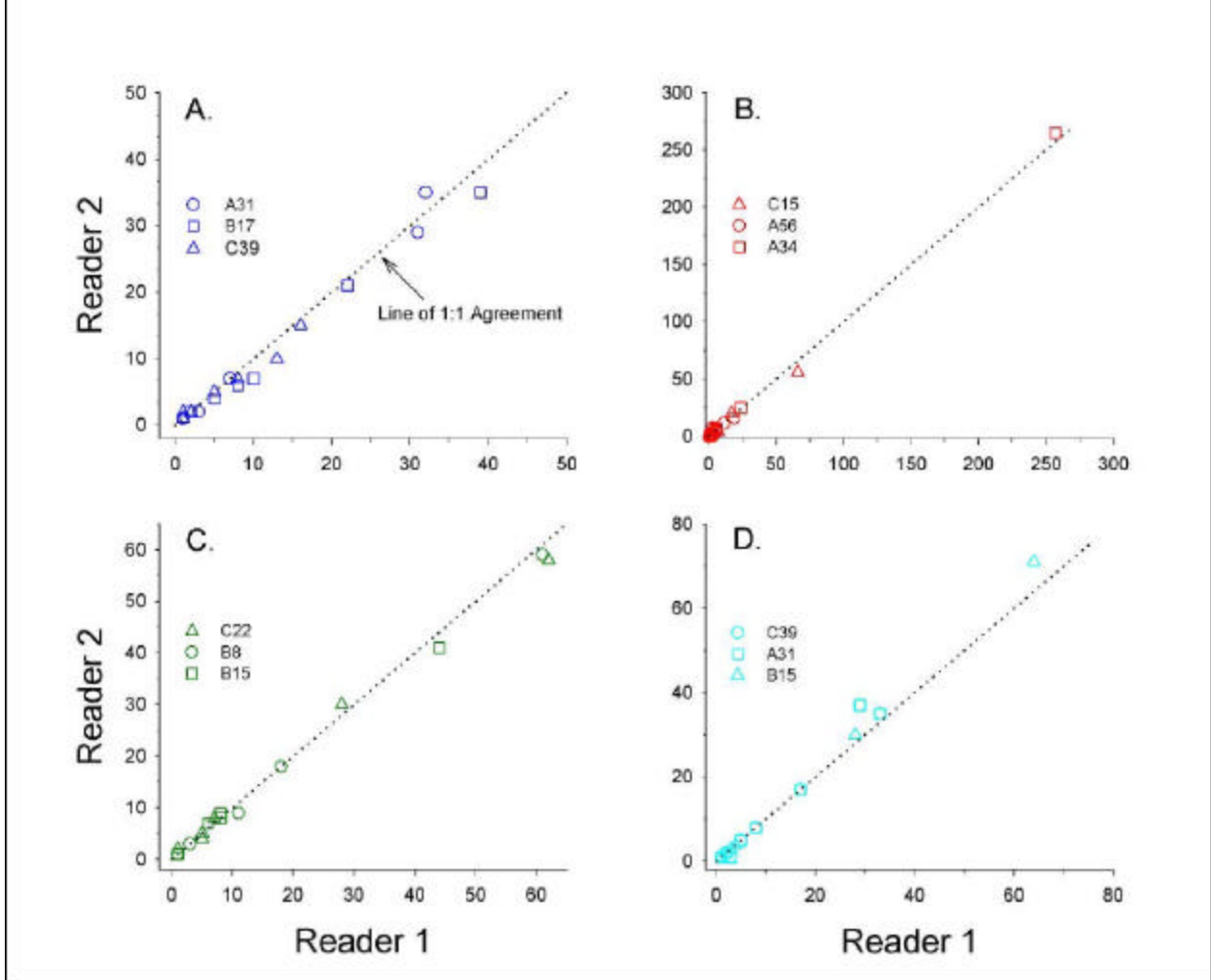
Video Sampling

Sites with individual modules of pairs (B- and C-type reefs) separated by >10m were video sampled with the ROV as if modules were separate reefs (Tables 7-10). Fish counts were then summed between modules to estimate total numbers of fishes present. This significantly increased both sampling and analysis time. A total of 33 video samples were taken and analyzed from 27 reef sites sampled in December 2004. In March and June 2005, respectively, totals of 42 and 35 samples were collected and analyzed.

The mean APE for the 2004-05 quarterly video samples read by Mike Dance and Will Patterson was 5.5% (Fig. 7). Thus, reader agreement was within the specification (< 10 %) established *a priori*. The APE computed for March 2005 comparison sites was 17.4%; however,

this was inflated due to large species-specific APEs for only six species counts. Those species had few (< 5) individuals present and APE is most sensitive to small sample sizes. Therefore, small differences in counts for those species yielded large species-specific APEs.

Figure 7. Scatterplots of reader 1 (Mike Dance) versus reader 2 (Will Patterson) fish counts. Diagonal lines in each panel indicate the line of 1:1 reader agreement. Panels A through D depict reader agreement for samples compared in December 2004, March 2005, June 2005, and September 2005, respectively.



Qualitatively, it is difficult to see much pattern in fish abundance and diversity among reef types (Tables 7-10). Perhaps a longer time series and forthcoming quantitative analyses will reveal patterns not presently seen. Across all sites there are only a few species that are dominant and nearly always present. June samples tended to have higher fish counts than March and March counts were higher than in December samples. Little difference in absolute numbers of fishes was observed between June and September; however, many fewer grouper were observed in September than the previous quarters. Overall, there was great variability in number of fishes present among the sites of a given reef type. Some sites, such as A34, consistently have high fish biomass, whereas others, such as A36, tend to have low biomass.

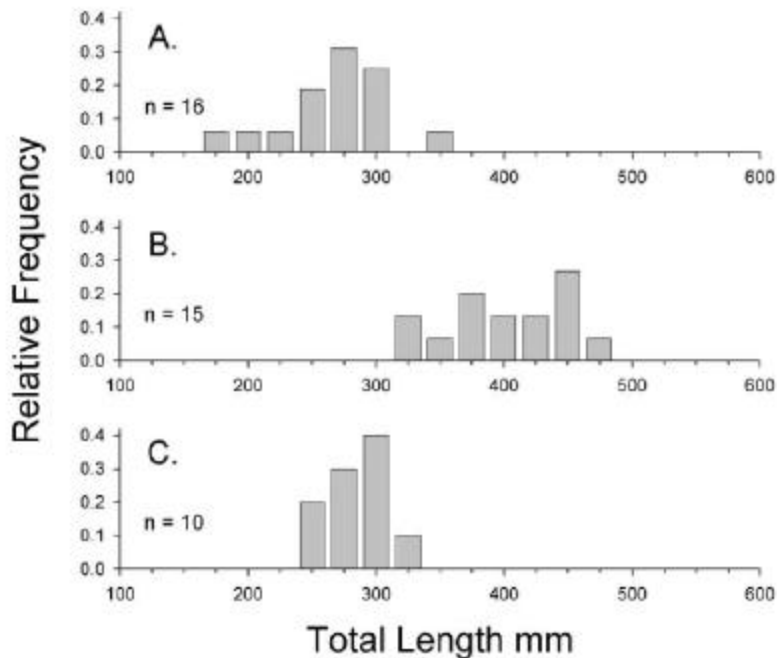
Hydrographic parameters measured 1 m above the seafloor in September 2005 indicate dissolved oxygen levels were near saturation (Table 11). It is likely significant tropical weather, most notably in the form of Hurricanes Katrina and Rita, facilitated water column turnover in the region, thus keeping dissolved oxygen levels high. As stated above, CTD cast data from 2004-05 will be reported in the future when correction factors can be computed to adjust the raw data.

Video Estimation of Fish Lengths

During Fall 2004 and Winter 2005 no laser system compatible with our ROV was available to estimate fish length. A prototype system was supposed to be available from VideoRay in Summer 2004 but was not available until June 2005. VideoRay loaned us a prototype set of lasers for our June sampling, but we were only able to get them for June 27th sampling. We again borrowed the prototype set in September 2005. In that quarter we were able to deploy the lasers for all our video sampled that month. All future video sampling will be conducted with lasers.

Fish lengths were estimated for the sites on which lasers were deployed in June 2005; estimation of fish lengths from September 2005 video is ongoing. Estimated fish lengths will be compared within species among reef types to examine whether differences in fish size are observed (e.g., Figure 8). We also will be able to estimate size at recruitment to reefs and track individual cohorts of a given species.

Figure 8. Red snapper total length distributions estimated from laser sampling at A, B, and C reef types on June 27, 2005. Panel A is the aggregate distribution from sites A31, A35, and A36. Panel B is the aggregate distribution from sites B7, B8, and B16. Panel C is the aggregate distribution from sites C25 and C32. Sample sizes in each panel indicate number of red snapper measured among reefs of each type.



Tagging

A total of 973 fish was tagged between March, June, and September sampling dates (Table 12); an additional 66 fish were captured but not tagged due either to their small size, poor condition, or being a non-target species (Table 13). The vast majority of tagged fish have been red snapper ($n = 651$); however, 116 gray triggerfish, 94 gag, 59 red porgy, 30 red grouper, 30 vermilion snapper, and 13 scamp also have been tagged. Although there is not a great difference in depths among our tagging sites, release condition does appear to be related to water depth (Tables 11, 12). We switched site A19 for A34 following March 2005 tagging because a high percentage of fish captured at A34 (depth = 41.5 m) were released in a condition other than condition-1 (47.5%).

A total of 28 fish have been recaptured at their site of tagging on subsequent tagging trips (Table 14). No fish tagged has been recaptured on tagging trips at a site other than where it was tagged. However, two tagged fish were observed during video analysis of site B 11, a site where tagging does not occur. Most recaptures from fishers were caught in the Escambia East LAARS; however, some extensive movement of fishes was observed despite the short time period fish have been tagged (Table 15). Several fish have moved tens of km, with one red snapper being recaptured off Panama City. Several fish that were captured and tagged at site C2 1 in December 2004 were reported to have been caught on March 26, 2005 from a reef with Loran C coordinates that match the GPS coordinates of C2 1. Therefore, it appears at least one of tagging sites has been found by a fisher. Other evidence of fishers finding our study sites includes monofilament observed in video of site A36, which is not a tagging site.

Problems Encountered in Year One

Several problems were encountered in the first year of the study, most of which were correctable and have been fixed. The first setback in the study was the later than expected start date. This would not have been a problem except for the fact Hurricane Ivan made landfall in September 2004 in northwest Florida. Ivan likely had some effect on our reef sites and their associated fish communities but the Ivan's effect is unknown because we were unable to visit sites prior to the storm. Many individual modules of B-type sites are toppled and several reef balls at C-type sites are broken. It is unknown whether those two issues occurred upon deployment or as a result of wave action during Ivan. It seems more likely the distance observed between many of the B-type module pairs was the result of poor deployment given the facts that almost all A-type and C-type reefs were found right on deployment coordinates and typically one of the B-type modules of a given pair was found near (within 30 m) the deployment coordinates with the second module farther away, sometimes significantly.

The distance between several B-type module pairs and two of the C-type pairs, regardless of the cause, has resulted in increased sampling effort and analysis time than originally anticipated. We have been able to adjust for that problem but had to change our sample design in March 2005 in an effort to find the most usable sites. Optimally, that would have been accomplished during initial site inspections in November 2004. However, inspections took longer than we estimated given the difficulty finding B-type reefs and due to the fact we were using the wrong C-type reef deployment coordinates to search for those reefs.

Technical issues with UWF's VideoRay Pro III caused us to return to the dock during fall and spring quarter sampling. VideoRay was using a new termination block (connector between the ROV and tether) vendor on machines they built around the time ours was ordered (summer 2004). The termination block failed in December 2004 while we were sampling. We returned to

the dock and sent the machine to VideoRay for repair. They in turn overnighed another ROV to us which allowed us to complete fall 2004 sampling. Our ROV was repaired and returned to us in January 2005. In June 2005 we again had problems with the termination block and had to return to the dock. We completed sampling a couple weeks later with another loaner ROV from VideoRay. VideoRay rebuilt our ROV in August 2005, including installation of a re-engineered termination block. They are confident the problem finally is fixed; we experienced no technical failures in September 2005 sampling are optimistic they are correct .

The last issue that has somewhat limited our sampling in the first year of the study has been the unavailability of a laser system compatible with our ROV. As stated above, VideoRay loaned us a prototype set of lasers for our June and September sampling. VideoRay currently is conducting market analysis to set a price for the prototype lasers we have used. When lasers are available for purchase, we anticipate doing so. In the meantime, we will continue to borrow a VideoRay prototype to accomplish that portion of our sampling.

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Appendix:

**Tables 2-15
and
Tagging Poster**

Table 2. Reef sites visited during initial site inspections in fall 2004.

Reef	Date	Reef	Date	Reef	Date
A12	11/23/04	C32	11/23/04	C23	11/29/04
A56	11/23/04	B15	11/23/04	C21	11/29/04
C39	11/23/04	A3 6	11/29/04	B9	11/29/04
B8	11/23/04	A3 5	11/29/04	B10	11/29/04
C36	11/23/04	C25	11/29/04	B11	11/29/04
A53	11/23/04	A34	11/29/04	C15	11/29/04
B17	11/23/04	A3 1	11/29/04		

Table 3. Dates sampling was conducted at A-type reefs during fall, winter, spring, and quarters in 2004-2005.

Reef	Fall 2004	Video Sampling			Winter 2004	Tagging	
		Winter 2005	Spring 2005	Summer 2005		Spring 2005	Summer 2005
A12	12/2/04	3/25/05	6/7/05	9/19/05	3/26/05	6/9/05	9/27/05
A19	12/19/04	3/23/05	6/7/05	9/19/05		6/9/05	9/27/05
A20	12/12/04	3/23/05	6/7/05	9/29/05	3/26/05	6/9/05	9/27/05
A3 1	12/3/04	3/24/05	6/27/05	9/20/05			
A34	12/3/04	3/24/05	6/27/05	9/20/05	3/26/05		
A3 5	12/3/04	3/24/05	6/27/05	9/29/05			
A3 6	12/2/04	3/24/05	6/27/05	9/19/05			
A53	12/2/04	3/24/05	6/7/05	9/19/05			
A56	12/2/04	3/24/05	6/7/05	9/19/05			

Table 4. Dates sampling was conducted at B-type reefs during fall, winter, spring, and summer quarters in 2004-2005.

Reef	Fall 2004	Video Sampling			Winter 2004	Tagging	
		Winter 2005	Spring 2005	Summer 2005		Spring 2005	Summer 2005
B1		3/25/05	6/7/05	9/29/05			
B2		3/25/05	6/7/05	9/20/05	3/26/05	6/9/05	9/27/05
B3	12/12/04	3/23/05	6/7/05	9/19/05			
B4	12/12/04	3/23/05	6/7/05	9/20/05			
B7	12/2/04	3/24/05	6/27/05	9/19/05			
B8	12/2/04	3/24/05	6/27/05	9/29/05	3/26/05	6/9/05	9/27/05
B9	12/3/04	3/23/05	6/8/05	9/20/05	3/26/05	6/9/05	9/27/05
B10	12/3/04	3/23/05					
B11	12/3/04	3/23/05	6/8/05	9/20/05			
B14		3/24/05					
B15	12/2/04	3/24/05					
B16		3/24/05	6/27/05	9/29/05			
B17	12/2/04	3/24/05					
B18		3/24/05					

Table 5. Dates sampling was conducted at C-type reefs during fall, winter, spring, and summer quarters in 2004-2005.

Reef	Fall 2004	Video Sampling			Winter 2004	Tagging	
		Winter 2005	Spring 2005	Summer 2005		Spring 2005	Summer 2005
C12	12/12/04	3/23/05	6/8/05	9/19/05			
C14	12/12/04	3/23/05	6/7/05	9/20/05			
C15	12/3/04	3/23/05	6/7/05	9/20/05	3/26/05	6/9/05	9/27/05
C21	12/3/04	3/23/05	6/8/05	9/29/05	3/26/05	6/9/05	9/27/05
C22	12/3/04	3/24/05	6/8/05	9/20/05			
C23	12/3/04	3/24/05					
C25		3/24/05	6/27/05	9/29/05			
C32	12/2/04	3/24/05	6/27/05	9/19/05	3/26/05	6/9/05	9/27/05
C36	12/2/04	3/24/05	6/7/05	9/19/05			
C39	12/2/04	3/25/05	6/7/05	9/29/05			

Table 6. Tabular inventory of all reef sites visited during initial ROV inspections and quarterly video sampling. Comments include site condition, as well as module locations relative to deployment coordinates.

Site	Date First Visited	Date Last Visited	Comments
A12	11/23/04	9/19/05	Site found at deployment coordinates. SE and SW corners of module are somewhat buried in sediment (~0.3 m). Scouring observed in N corner to below base.
A19	12/19/04	9/19/05	Site found at deployment coordinates. N corner of module significantly buried in sediment (0.25-0.5 m). Scouring in SE and SW corners, moreso in SW corner but base not fully exposed.
A20	12/12/04	9/29/05	Site found at deployment coordinates. Module tilted to E with sand waves around structure. SE and SW corners buried. SE corner under 0.25-0.5 m of sediment by June 05. N corner scoured to below base in March 05, less so by June
A3 1	11/29/04	9/20/05	Site found at deployment coordinates. Site significantly (> 0.5 m) buried since Nov 04. Some scouring observed in SW corner in Sept 05.
A34	11/29/04	9/20/05	Site found at deployment coordinates. Site significantly (> 0.5 m) buried since Nov 04. Some scouring in SE corner but not even to module base.
A3 5	11/29/04	9/29/05	Site found at deployment coordinates. Site significantly (> 0.5 m in NW corner) buried since Nov 04. Limited scouring in E corner but only to top of module base by June 05.
A3 6	11/29/04	9/19/05	Site found at deployment coordinates. Module on its side. Pointed toward W and buried to ~0.3 m
A53	11/23/04	9/19/05	Site found at deployment coordinates. Entire base buried to 0.25-0.5 m. Limited scouring observed.
A56	11/23/04	9/19/05	Site found at deployment coordinates. Module buried to ~0.25 m. Limited scouring in NW and SW corners by March 05. Significant scouring on all sides by June 05; pipe lying next to module on east side. In Sept 05 pipe is no longer next to module, burial increased to (0.25 - 0.5 m), and scour around modules filled.
B1	3/25/05	9/29/05	Site found ~60 m to the east of deployment coordinates. Modules about 20 m apart. Both are toppled; one pointing ENE, the other E. Both have one side buried <0.25 m in sediment.
B2	3/25/05	9/20/05	Site found ~35 m to the east of deployment coordinates. Modules are sitting right next to each other, one upright, one toppled. Both in sediment ~0.25 m, but upright module moreso. Scouring evident around N and S sides of sight, but moreso on S side. Toppled reef points W with ~0.5 m sediment mound in open (E) end.

Table 6. Tabular inventory of reef sites continued.

Site	Date First Visited	Date Last Visited	Comments
B3	12/12/04	9/19/05	First module ~1 8 m to the E of deployment coordinates. Did not find second in Dec 04 due to poor vis. Found both in March 05 ~15 m apart. One upright <0.25 m in sediment; other toppled pointing WNW and <0.25 m in sediment. Found low profile concrete and rebar structure ~1 5-20 m E of first module in Dec 04.
B4	12/12/04	9/20/05	First module located on deployment coordinates; second ~30m to E of first. First module upright, buried ~.25 m, no scour. Second module toppled, pointing E, buried <0.25 m, very little scour.
B7	12/2/04	9/19/05	First module ~1 0 m from deployment coordinates; second is ~30 m to the NNE of first. First module toppled, pointing NE, buried <0.25 m, slight scouring along sides. Second module upright, SW and NW corners buried ~0.25 m; E corner scoured; tire along NE side of module.
B8	11/23/04	9/29/05	Both modules found together ~50 m NNE of deployment coordinates. First module toppled, pointed toward E, buried <0.25 m in sediment, slight scour on all sides. Second module upright, buried ~0.3 m in sediment.
B9	11/29/04	9/2005	Both modules close to deployment coordinates; second module ~15 m E of first. First module toppled, pointed toward NE, buried <0.25 m in sediment. Second module upright, buried ~0.3 m in sediment.
B 10	11/29/04	3/23/05	Only one module found near deployment coordinates. Searched ~20 ha area with ship's bottom machine but never found second module. Found module upright, buried ~0.3 m in sediment, leaning toward NE.
B11	11/29/04	9/20/05	First module found 15 m from deployment coordinates; second is 30 m to the SW of first. First module toppled, pointed toward WNW; second module toppled, pointed toward ESE. Neither module buried.
B14	3/24/05	3/24/05	First module ~60 m NE of deployment coordinates; second module 30 m ENE of first. First module toppled, buried <0.25 m. Second module toppled and broken at base, buried <0.25 m, pointed toward E.
B15	11/23/04	3/24/05	One module found ~40 m SE of deployment coordinates; searched for second module in Nov, Dec, and March but never found. Found module buried ~0.25 m in sediment, scour around base.
B16	3/24/05	9/29/05	First module ~17 m NE of deployment coordinates; second module ~45 m to the W. First module upright, buried 0.25-0.5 m in sediment with significant scour. Second module toppled, buried <0.25 m, pointed E.
B 17	11/23/04	3/24/05	Found first module in Nov 04 near deployment coordinates. Module upright, buried ~0.3 m in sediment. Found second module in March 05 ~50 m W of first module. Second module toppled, buried ~0.25m in sediment, pointed toward W.

Table 6. Tabular inventory of reef sites continued.

Site	Date First Visited	Date Last Visited	Comments
B18	3/24/05	3/24/05	Found one module near deployment coordinates. Module upright, buried in sediment ~0.25 m. Ten tires and some cinder blocks next to module. Never looked for second module.
C12	12/12/04	9/1 9/ 05	Found site ~25 m N of deployment coordinates. Modules touching, buried < 0.25 m, some minor scour. One module leaning into the other.
C14	12/12/04	9/20/05	Found first module at deployment coordinates in Dec 04; vis. too poor to find second module. Found second module in March 05, ~20 m from the first. Both modules buried ~0.25 m, some scour around each.
C15	11/29/05	9/20/05	Found both modules ~2 m apart at deployment coordinates. Both modules buried ~0.25 m in sediment.
C21	11/29/05	9/21/05	Found both modules side by side at deployment coordinates. Both modules buried ~0.25 m. Second module broken, missing about ¼ of structure on the SW side of module.
C22	11/29/05	9/20/05	Found both modules < 0.5 m apart at deployment coordinates. Both modules buried ~0.25 m. Both leaning slightly toward each other with minor scour.
C23	11/29/05	3/24/05	Found first module near deployment coordinates in Nov 04; second module ~100 m to the east. Could not find second module in March 05 due to poor visibility.
C25	3/24/05	9/29/05	Found both modules ~25 m NNW of deployment coordinates in March 05. Second module broken in half with main part ~2 m from first module. Both module bases buried ~0.25 m in sediment with minor scouring.
C32	11/23/04	9/19/05	Found both modules side by side at deployment coordinates. One module whole, the other missing its top half. Both bases ~0.25 m in sediment with scouring around each. By Sept 05 burial increased to ~ 0.5 m. Broken reef barely there at all.
C36	11/23/04	9/19/05	Found both modules near deployment coordinates. First module upright and buried ~0.25 m in sediment. Second module on its side ~20 m to the E of first, buried ~0.25 m.
C39	11/23/04	9/29/05	Found both modules at deployment coordinates. Modules ~0.1 m apart. Both buried 0.25-0.5 m in sediment. Significant scouring on NW and SW sides. In Sept 05 burial > 0.5 m; scouring not as apparent.

Table 7. Fishes identified and enumerated over unreported artificial reefs off northwest Florida in the northern Gulf of Mexico during fall 2004. Counts were made in a cylinder with an estimated diameter of 15 m around each reef following the methodology detailed in this report. Modules at a given site were sampled separately if they were greater than 10 m apart. Abundances at those sites are reported for each module (a,b) and also summed (T) between modules.

Species	A12	A19	A20	A31	A34	A35	A36	A53	A56
<i>Balistes capricus</i>	5	7	2	2		4	3	31	5
<i>Epinephelus morio</i>	1	3		1	2	6		1	2
<i>Holacanthus bermudensis</i>				1	2			1	3
<i>Lutjanus campechanus</i>	4	13	5	35	16	8	5	27	14
<i>Lutjanus griseus</i>									
<i>Mycteroperca microlepis</i>	4	6	16	7	3	1		17	15
<i>Mycteroperca phenax</i>	2	3	7		4	3	1	2	2
<i>Pagrus pagrus</i>						1			
<i>Rypticus maculatus</i>		1		4	2	1			
<i>Seriola spp.</i>		1	5	7					
<i>Seriola rivoliana</i>	1								6
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>	1							6	
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
							21		
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
							50		
<i>Lactophrys quadricornis</i>									
<i>Lagadon rhomboides</i>									
<i>Lutjanus synagris</i>									
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>									
<i>Scomberomorus cavalla</i>									
<i>Sphyraena barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 7. Fall 2004 fish counts continued.

Species	B3	B4a	B4b	B4T	B7a	B7b	B7T	B8	B9a
<i>Balistes capriscus</i>	16	87	14	101	27	15	42	11	10
<i>Epinephelus morio</i>	3	2	2	4	23	2	25	1	1
<i>Holacanthus bermudensis</i>		1		1		1	1		
<i>Lutjanus campechanus</i>	15	35	45	80	48	38	86	55	24
<i>Lutjanus griseus</i>					2	2	4		
<i>Mycteroperca microlepis</i>	1	4	7	11	7	12	19	4	10
<i>Mycteroperca phenax</i>	9	6	2	8	6	10	16	4	3
<i>Pagrus pagrus</i>	3		2	2					
<i>Rypticus maculatus</i>									
<i>Seriola spp.</i>			2	2					
<i>Seriola rivoliana</i>					11	1	12	1	
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>						1	1	1	
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>	8								
<i>Carcharhinus limbatus</i>	1								
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagadon rhomboides</i>									
<i>Lutjanus synagris</i>									1
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>						3	3		
<i>Scomberomorus cavalla</i>	1								
<i>Sphyraena barracuda</i>	1								
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 7. Fall 2004 fish counts continued.

Species	B9b	B9T	B10	B11a	B11b	B11T	B15	B17	C14
<i>Balistes capriscus</i>	17	27	13	19	21	40	25	21	17
<i>Epinephelus morio</i>	2	3	2	4	1	5	21	7	3
<i>Holacanthus bermudensis</i>				1		1	1		
<i>Lutjanus campechanus</i>	7	31	13	30	11	41	83	39	7
<i>Lutjanus griseus</i>									18
<i>Mycteroperca microlepis</i>	6	16	8	1	4	5	5	4	10
<i>Mycteroperca phenax</i>	6	9	5	5	8	13	13	8	7
<i>Pagrus pagrus</i>									2
<i>Rypticus maculatus</i>									
<i>Seriola spp.</i>	1	1	1						28
<i>Seriola rivoliana</i>									
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>									1
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plumbeus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagodon rhomboides</i>									
<i>Lutjanus synagris</i>									
									1
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>									
<i>Scomberomorus cavalla</i>									
<i>Sphyrna barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									1
unidentified small fishes									

Table 7. Fall 2004 fish counts continued.

Species	C15	C21	C22	C23a	C23b	C23T	C32	C36a	C36b
<i>Balistes capriscus</i>	15	18	21	4	2	6	13	14	5
<i>Epinephelus morio</i>	9	11	22	11	5	16	19	18	4
<i>Holacanthus bermudensis</i>		1							
<i>Lutjanus campechanus</i>	7	80	102	27	41	68	26	8	12
<i>Lutjanus griseus</i>	12								
<i>Mycteroperca microlepis</i>	10	8	13	5	3	8	10	15	1
<i>Mycteroperca phenax</i>	7	8	12	1	5	6	11	5	1
<i>Pagrus pagrus</i>	5	2							
<i>Rypticus maculatus</i>									
<i>Seriola spp.</i>	15	9	1						
<i>Seriola rivoliana</i>									
<i>Apogon psuedomaculatus</i>									
<i>Aleterus monoceros</i>							1		
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagadon rhomboides</i>									
<i>Lutjanus synagris</i>									
		1	1						
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>									
<i>Scomberomorus cavalla</i>									
<i>Sphyræna barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 7. Fall 2004 fish counts continued.

Species	<u>C36T</u>	<u>C39</u>
<i>Balistes caprisus</i>		
<i>Epinephelus morio</i>	19	10
<i>Holacanthus bermudensis</i>	22	1
<i>Lutjanus campechanus</i>		1
<i>Lutjanus griseus</i>		
<i>Mycteroperca microlepis</i>	20	5
<i>Mycteroperca phenax</i>		
<i>Pagrus pagrus</i>	16	16
	6	9
<i>Rypticus maculatus</i>		
<i>Seriola spp.</i>		2
<i>Seriola rivoliana</i>		
<i>Apogon psuedomaculatus</i>		
<i>Aletherus monoceros</i>		1
<i>Aluterus heudeloti</i>		
<i>Aluterus schoepfi</i>		
<i>Calamus leucosteus</i>		
<i>Caranx crysos</i>		
<i>Carcharhinus limbatus</i>		
<i>Carcharhinus plum beus</i>		
<i>Centropristis ocyurus</i>		
<i>Chaetodipterus faber</i>		
<i>Dasyatis americana</i>		
<i>Decapterus macarellus</i>		
<i>Ginglymostoma cirratum</i>		
<i>Haemulon aurolineatum</i>		
<i>Lactophrys quadricornis</i>		
<i>Lagadon rhomboides</i>		
<i>Lutjanus synagris</i>		
<i>Monacanthus hispidus</i>		
<i>Paralichthys albigutta</i>		
<i>Rachycentron canadum</i>		
<i>Rhomboplites aurorubens</i>		
<i>Scomberomorus cavalla</i>		
<i>Sphyaena barracuda</i>		
<i>Apogon sp.</i>		
<i>Calamus sp.</i>		
Monacanthidae sp.		
Serranidae sp.		
unidentified small fishes		

Table 8. Fishes identified and enumerated over unreported artificial reefs off northwest Florida in the northern Gulf of Mexico during winter 2005. Counts were made in a cylinder with an estimated 15 m diameter around each reef following the methodology detailed in this report. Modules at a given site were sampled separately if they were greater than 10 m apart. Abundances at those sites are reported for each module (a,b,c) and also summed (T) between modules.

Species	A12	A19	A20	A31	A34	A35	A36	A53	A56
<i>Balistes capriscus</i>	2	3	7	4	7	3	1	24	2
<i>Epinephelus morio</i>		2	1	1	1	8		2	
<i>Holacanthus bermudensis</i>				1	1				1
<i>Lutjanus campechanus</i>	29	15	4		125	45		44	11
<i>Lutjanus griseus</i>			2						
<i>Mycteroperca microlepis</i>	12	6	12	8	2	3		7	19
<i>Mycteroperca phenax</i>	4	4	4		5	2	1	4	2
<i>Pagrus pagrus</i>		6	10		1	3			
<i>Rypticus maculatus</i>				2	2				
<i>Seriola spp.</i>			5		5	1			1
<i>Seriola rivoliana</i>									
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>									1
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>							17		
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>								34	
<i>Chaetodipterus faber</i>								34	
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>								256	
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>								122	
<i>Lactophrys quadricornis</i>									
<i>Lagadon rhomboides</i>									
<i>Lutjanus synagris</i>									
<i>Monacanthus hispidus</i>							2		
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									2
<i>Rhomboplites aurorubens</i>			3						
<i>Scomberomorus cavalla</i>									
<i>Sphyraena barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 8. Winter 2005 fish counts continued.

Species	B1a	B1b	B1T	B2	B3	B4a	B4b	B4T	B7a
<i>Balistes capriscus</i>	10	3	13	37	20	23	13	36	16
<i>Epinephelus morio</i>	1	1	2	22	3	2	2	4	5
<i>Holacanthus bermudensis</i>				1		1		1	
<i>Lutjanus campechanus</i>	41	9	50	56	59	78	18	96	63
<i>Lutjanus griseus</i>				2	8	16	4	20	
<i>Mycteroperca microlepis</i>	7	1	8	10	8	1		1	5
<i>Mycteroperca phenax</i>	4	1	5	2	3	4	2	6	5
<i>Pagrus pagrus</i>					2	47	15	62	
<i>Rypticus maculatus</i>					4		1	1	
				3	2				
<i>Seriola spp.</i>									
<i>Seriola rivoliana</i>									
<i>Apogon psuedomaculatus</i>									
<i>Aletherus monoceros</i>									
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Echeneis naucrates</i>					1				
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagodon rhomboides</i>									
<i>Lutjanus synagris</i>									
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>					2				
<i>Scomberomorus cavalla</i>									
<i>Sphyraena barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 8. Winter 2005 fish counts continued.

Species	B7b	B7T	B8	B9a	B9b	B9T	B10	B11a	B11b
<i>Balistes capriscus</i>	17	33	26	6	33	39	24	28	17
<i>Epinephelus morio</i>	2	7	3	2	2	4	2	2	1
<i>Holacanthus bermudensis</i>	1	1							
<i>Lutjanus campechanus</i>	33	96	77	5	4	9	25	75	27
<i>Lutjanus griseus</i>			1						
<i>Mycteroperca microlepis</i>	4	9	9	1	8	9	6	7	9
<i>Mycteroperca phenax</i>	4	9	3		3	3	6	3	7
<i>Pagrus pagrus</i>							1	7	1
<i>Rypticus maculatus</i>			1						
<i>Seriola spp.</i>				5	8	13	17		
<i>Seriola rivoliana</i>				1		1	1		
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>									
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plumbeus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagodon rhomboides</i>									
<i>Lutjanus synagris</i>									
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>									
<i>Scomberomorus cavalla</i>									
<i>Sphyrna barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 8. Winter 2005 fish counts continued.

Species	B11T	B14a	B14b	B14c	B14T	B15	B16a	B16b	B16T
<i>Balistes capriscus</i>	45	2	8	9	19	85	34	11	45
<i>Epinephelus morio</i>	3	3	12	2	17	67	37	4	41
<i>Holacanthus bermudensis</i>						59		1	1
<i>Lutjanus campechanus</i>	102	66	101	26	193	58	40	41	81
<i>Lutjanus griseus</i>						14			
<i>Mycteroperca microlepis</i>	16	10	7	2	19	14	9	14	23
<i>Mycteroperca phenax</i>	10	18	5	6	29	8	6	5	11
<i>Pagrus pagrus</i>	8								
<i>Rypticus maculatus</i>									
<i>Seriola spp.</i>		2			2		1		1
<i>Seriola rivoliana</i>									
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>									
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									1
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagadon rhomboides</i>									
<i>Lutjanus synagris</i>									
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>									1
<i>Scomberomorus cavalla</i>									
<i>Sphyræna barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									1
Serranidae sp.									
unidentified small fishes									

Table 8. Winter 2005 fish counts continued.

Species	B17a	B17b	B17T	B18	C12	C14a	C14b	C14T	C15
<i>Balistes caprisicus</i>	15	10	25	32	11	16	32	48	31
<i>Epinephelus morio</i>	2	2	4	3	6	1	2	3	3
<i>Holacanthus bermudensis</i>						1		1	1
<i>Lutjanus campechanus</i>	62	26	88	52	41	35	9	44	17
<i>Lutjanus griseus</i>				1		1	15	16	66
<i>Mycteroperca microlepis</i>	13	7	20	10	7	4	1	5	7
<i>Mycteroperca phenax</i>	9	6	15	4	2	2		2	2
<i>Pagrus pagrus</i>					9	4		4	
<i>Rypticus maculatus</i>					3	1		1	
<i>Seriola spp.</i>						24	3	27	4
<i>Seriola rivoliana</i>				2					1
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>									
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagodon rhomboides</i>									
<i>Lutjanus synagris</i>									1
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>									5
<i>Scomberomorus cavalla</i>									
<i>Sphyrna barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 8. Winter 2005 fish counts continued.

Species	C2	C22	C25	C32	C36	C39
<i>Balistes capriscus</i>	24	11	3	9	13	12
<i>Epinephelus morio</i>	6	10	8	9	13	1
<i>Holacanthus bermudensis</i>	1					1
<i>Lutjanus campechanus</i>	124	63	45	10	13	1
<i>Lutjanus griseus</i>			1			
<i>Mycteroperca microlepis</i>	11	16	3	5	12	20
<i>Mycteroperca phenax</i>	4	2	2	7	4	2
<i>Pagrus pagrus</i>	1	9				
<i>Rypticus maculatus</i>						
<i>Seriola spp.</i>	2	2				

Seriola rivoliana

Apogon psuedomaculatus

Aleuterus monoceros

Aluterus heudeloti

Aluterus schoepfi

Calamus leucosteus

Caranx crysos

Carcharhinus limbatus

Carcharhinus plum beus

Centropristis ocyurus

Chaetodipterus faber

Dasyatis americana

Decapterus macarellus

Ginglymostoma cirratum

Haemulon aurolineatum

Lactophrys quadricornis

Lagadon rhomboides

Lutjanus synagris

Monacanthus hispidus

Paralichthys albigutta

Rachycentron canadum

Rhomboplites aurorubens

Scomberomorus cavalla

Sphyrnaena barracuda

Apogon sp.

Calamus sp.

Monacanthidae sp.

Serranidae sp.

unidentified small fishes

Table 9. Fishes identified and enumerated over unreported artificial reefs off northwest Florida in the northern Gulf of Mexico during spring 2005. Counts were made in a cylinder with an estimated 15 m diameter around each reef following the methodology detailed in this report. Modules at a given site were sampled separately if they were greater than 10 m apart. Abundances at those sites are reported for each module (a,b) and also summed (T) between modules.

Species	A12	A19	A20	A31	A34	A35	A36	A53	A56
<i>Balistes capriscus</i>		6	1		3	2		19	2
<i>Epinephelus morio</i>				1	2	3			
<i>Holacanthus bermudensis</i>		1			2			1	2
<i>Lutjanus campechanus</i>	35	42	8	1	257	62	45	49	5
<i>Lutjanus griseus</i>	27							6	1
<i>Mycteroperca microlepis</i>	10	9	11	5	5	3		10	12
<i>Mycteroperca phenax</i>	2	1	5		6	3		7	
<i>Pagrus pagrus</i>	2		2		5				1
<i>Rypticus maculatus</i>				2		1			
<i>Seriola spp.</i>							2		
<i>Seriola rivoliana</i>				1				2	
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>									
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>					1				
<i>Carcharhinus limbatus</i>				1					
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>				4			32		
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>				1			91		
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>							45		
<i>Lactophrys quadricornis</i>									
<i>Lagadon rhomboides</i>									
<i>Lutjanus synagris</i>									1
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>							1		
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>					24	4			
<i>Scomberomorus cavalla</i>									
<i>Sphyraena barracuda</i>									
<i>Apogon sp.</i>				4					
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes				48					

Table 9. Spring 2005 fish counts continued.

Species	B1a	B1b	B1T	B2	B3	B4a	B4b	B4T	B7a
<i>Balistes capriscus</i>	1	3	4	36	35	17	30	47	16
<i>Epinephelus morio</i>	2	1	3	1	2	1		1	5
<i>Holacanthus bermudensis</i>				1			1	1	1
<i>Lutjanus campechanus</i>	111	26	137	113	43	102	108	210	42
<i>Lutjanus griseus</i>				27	21	53	43	96	1
<i>Mycteroperca microlepis</i>	1	3	4	3	7	6	9	15	6
<i>Mycteroperca phenax</i>	1	2	3	4	6	2	3	5	5
<i>Pagrus pagrus</i>				1	27	86	1	87	
<i>Rypticus maculatus</i>	1		1						
<i>Seriola spp.</i>				4			2	2	
<i>Seriola rivoliana</i>				3		1	2	3	2
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>									
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagadon rhomboides</i>									
<i>Lutjanus synagris</i>				1	66		2	2	
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>					12				
<i>Scomberomorus cavalla</i>							5	5	
<i>Sphyraena barracuda</i>		1	1	1	1				
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 9. Spring 2005 fish counts continued.

Species	B7b	B7T	B8	B9a	B9b	B9T	B11a	B11b	B11T
<i>Balistes capriscus</i>	16	32	5	7	2	9	13	11	24
<i>Epinephelus morio</i>	14	19	3	1		1	3	2	5
<i>Holacanthus bermudensis</i>		1							
<i>Lutjanus campechanus</i>	19	61	61	76	10	86	62	11	73
<i>Lutjanus griseus</i>	1	2					1		1
<i>Mycteroperca microlepis</i>	3	9	1	9	3	12	2	4	6
<i>Mycteroperca phenax</i>	4	9	11	2	1	3	11	9	20
<i>Pagrus pagrus</i>					1	1	4		4
<i>Rypticus maculatus</i>				1		1			
<i>Seriola spp.</i>	1	1							
<i>Seriola rivoliana</i>	7	9							
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>									
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>	1	1							
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagodon rhomboides</i>									
<i>Lutjanus synagris</i>									
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>									
<i>Scomberomorus cavalla</i>									
<i>Sphyræna barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 9. Spring 2005 fish counts continued.

Species	B16a	B16b	B16T	C12	C14a	C14b	C14T	C15	C2
<i>Balistes capriscus</i>		15	15	9		6	6	1	23
<i>Epinephelus morio</i>	1		1	1	1	1	2	2	3
<i>Holacanthus bermudensis</i>					1	1	2		1
<i>Lutjanus campechanus</i>	21	77	98	61	4	7	11	25	191
<i>Lutjanus griseus</i>				1	1	21	22	72	
<i>Mycteroperca microlepis</i>	2	1	3	9	11	1	12	1	10
<i>Mycteroperca phenax</i>	5	4	9	4	2	4	6	12	3
<i>Pagrus pagrus</i>	6	6	12			22	22		3
<i>Rypticus maculatus</i>				1	2		2	2	4
<i>Seriola spp.</i>									3
<i>Seriola rivoliana</i>	1	2	3	1					
<i>Apogon psuedomaculatus</i>									
<i>Aleuterus monoceros</i>									
<i>Aluterus heudeloti</i>						2	2		
<i>Aluterus schoepfi</i>								1	
<i>Calamus leucosteus</i>	1		1						
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plumbeus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagodon rhomboides</i>									
<i>Lutjanus synagris</i>									
								1	
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>									36
<i>Scomberomorus cavalla</i>									
<i>Sphyraena barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 9. Spring 2005 fish counts continued.

Species	C22	C25	C32	C36a	C36b	C36T	C39
<i>Balistes capriscus</i>	5		1	10	3	13	2
<i>Epinephelus morio</i>	1	2	10	1	4	5	2
<i>Holacanthus bermudensis</i>							1
<i>Lutjanus campechanus</i>	62	148	6				3
<i>Lutjanus griseus</i>							
<i>Mycteroperca microlepis</i>	5	5	1	9	3	12	18
<i>Mycteroperca phenax</i>	7	2	3	6	4	10	3
<i>Pagrus pagrus</i>	28						
<i>Rypticus maculatus</i>		1					
<i>Seriola spp.</i>							
<i>Seriola rivoliana</i>							
<i>Apogon psuedomaculatus</i>							
<i>Aleuterus monoceros</i>							
<i>Aluterus heudeloti</i>							
<i>Aluterus schoepfi</i>							
<i>Calamus leucosteus</i>							
<i>Caranx crysos</i>							
<i>Carcharhinus limbatus</i>							
<i>Carcharhinus plum beus</i>							
<i>Centropristis ocyurus</i>							
<i>Chaetodipterus faber</i>							
<i>Dasyatis americana</i>							
<i>Decapterus macarellus</i>							
<i>Ginglymostoma cirratum</i>							
<i>Haemulon aurolineatum</i>							
<i>Lactophrys quadricornis</i>							
					1	1	
<i>Lagodon rhomboides</i>							
<i>Lutjanus synagris</i>							
<i>Monacanthus hispidus</i>							
<i>Paralichthys albigutta</i>							
<i>Rachycentron canadum</i>							
<i>Rhomboplites aurorubens</i>							3
<i>Scomberomorus cavalla</i>							
<i>Sphyraena barracuda</i>							
<i>Apogon sp.</i>							
<i>Calamus sp.</i>							
Monacanthidae sp.							
Serranidae sp.							
unidentified small fishes							

Table 10. Fishes identified and enumerated over unreported artificial reefs off northwest Florida in the northern Gulf of Mexico during summer 2005. Counts were made in a cylinder with an estimated 15 m diameter around each reef following the methodology detailed in this report. Modules at a given site were sampled separately if they were greater than 10 m apart. Abundances at those sites are reported for each module (a,b) and also summed (T) between modules.

Species	A12	A19	A20	A31	A34	A35	A36	A53	A56
<i>Balistes capriscus</i>	22	32	11	26	3	1	8	14	21
<i>Epinephelus morio</i>			1	3	1	2			
<i>Holacanthus bermudensis</i>	1				1		2	1	
<i>Lutjanus campechanus</i>	88	170	19	42	43	109	88	83	119
<i>Lutjanus griseus</i>	29	13	31		3	1	2	27	1
<i>Mycteroperca microlepis</i>	1		3	4	1			9	4
<i>Mycteroperca phenax</i>	1	2	3	8	4	1	1	1	
<i>Pagrus pagrus</i>				1					
<i>Rypticus maculatus</i>		1	4		2	1		1	7
<i>Seriola spp.</i>	14	2		16	3	18	20	8	29
<i>Seriola rivoliana</i>				3		1			
<i>Apogon psuedomaculatus</i>									
<i>Aluterus monoceros</i>			1					3	
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									3
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>			13		54				
<i>Carcharhinus limbatus</i>						1		1	
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>	1	5		6	6	15	2		
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>			203						
<i>Equetus acuminatus</i>									
<i>Equetus lanceolatus</i>									
<i>Equetus umbrosus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>			6						
<i>Halichoeres bivittatus</i>									
<i>Lactophrys quadricornis</i>		1							
<i>Lagodon rhomboides</i>									3
<i>Lutjanus synagris</i>		17						1	
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Priacanthus arenatus</i>	2						1		
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>		1		1	7				
<i>Scomberomorus cavalla</i>	1								
<i>Sphyræna barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.		1						6	
Serranidae sp.									
unidentified small fishes			151						116

Table 10. Summer 2005 fish counts continued.

Species	B1a	B1b	B1T	B2	B3	B4a	B4b	B4T	B7a
<i>Balistes capriscus</i>	1	1	2	45	17	59	22	81	7
<i>Epinephelus morio</i>		1	1	2	1	4	1	5	12
<i>Holacanthus bermudensis</i>				1	1	2		2	
<i>Lutjanus campechanus</i>	20	7	27	90	35	48	24	72	70
<i>Lutjanus griseus</i>				25	37	57	4	61	6
<i>Mycteroperca microlepis</i>				6		11	2	13	3
<i>Mycteroperca phenax</i>					2	3		3	
<i>Pagrus pagrus</i>					1				
<i>Rypticus maculatus</i>	1	3	4	1	5		1	1	
<i>Seriola spp.</i>				2		1		1	
<i>Seriola rivoliana</i>				1					1
<i>Apogon psuedomaculatus</i>	7	3	10						
<i>Aluterus monoceros</i>						2		2	
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
		101	101						
<i>Equetus acuminatus</i>									
<i>Equetus lanceolatus</i>	3	3	6						
<i>Equetus umbrosus</i>									
<i>Ginglymostoma cirratum</i>									1
<i>Haemulon aurolineatum</i>	12	38	50						
<i>Halichoeres bivittatus</i>		2	2						
<i>Lactophrys quadricornis</i>					1				
<i>Lagodon rhomboides</i>									
<i>Lutjanus synagris</i>				1	8	3	1	4	
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>					1				
<i>Priacanthus arenatus</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>					1				
<i>Scomberomorus cavalla</i>	1		1						
<i>Sphyrna barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>							2	2	
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes		344	344			70		70	115

Table 10. Summer 2005 fish counts continued.

Species	B7b	B7T	B8	B9a	B9b	B9T	B11a	B11b	B11T
<i>Balistes capriscus</i>	0	15	9	31	17	48	21	37	58
<i>Epinephelus morio</i>	2	14	1	1	6	7	1	4	5
<i>Holacanthus bermudensis</i>								1	1
<i>Lutjanus campechanus</i>	96	166	34	61	74	135	39	21	60
<i>Lutjanus griseus</i>	12	18						1	1
<i>Mycteroperca microlepis</i>	3	6			1	1	13	2	15
<i>Mycteroperca phenax</i>	8			3		3	1	10	11
<i>Pagrus pagrus</i>									
<i>Rypticus maculatus</i>				1	4	5		4	4
<i>Seriola spp.</i>			20	21	10	31	3	5	8
<i>Seriola rivoliana</i>		1			2	2			
<i>Apogon psuedomaculatus</i>									
<i>Aluterus monoceros</i>				1		1			
<i>Aluterus heudeloti</i>									
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>									
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Equetus acuminatus</i>									1
<i>Equetus lanceolatus</i>									
<i>Equetus umbrosus</i>									
<i>Ginglymostoma cirratum</i>	2	3							
<i>Haemulon aurolineatum</i>									
<i>Halichoeres bivittatus</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagadon rhomboides</i>									
<i>Lutjanus synagris</i>									
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Priacanthus arenatus</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>									
<i>Scomberomorus cavalla</i>									
<i>Sphyraena barracuda</i>									
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 10. Summer 2005 fish counts continued.

Species	B16a	B16b	B16T	C12	C14a	C14b	C14T	C15	C21
<i>Balistes capriscus</i>	25	14	39	30	29	10	39	13	14
<i>Epinephelus morio</i>	4	1	5	2	2		2	1	1
<i>Holacanthus bermudensis</i>						1	1		
<i>Lutjanus campechanus</i>	144	46	190	71	35	14	49	87	68
<i>Lutjanus griseus</i>	5	1	6	1	33	53	86		2
<i>Mycteroperca microlepis</i>	6		6	4	8	12	20	8	3
<i>Mycteroperca phenax</i>	1		1	3	6	3	9	1	1
<i>Pagrus pagrus</i>					1		1		2
<i>Rypticus maculatus</i>	2	1	3		2	4	6	2	3
<i>Seriola spp.</i>	37	25	62	26	1		1	1	3
<i>Seriola rivoliana</i>					3		3	8	
<i>Apogon psuedomaculatus</i>									
<i>Aluterus monoceros</i>	1		1						
<i>Aluterus heudeloti</i>		1	1						
<i>Aluterus schoepfi</i>									
<i>Calamus leucosteus</i>									
<i>Caranx crysos</i>	2	18	20						1
<i>Carcharhinus limbatus</i>									
<i>Carcharhinus plum beus</i>									
<i>Centropristis ocyurus</i>									
<i>Chaetodipterus faber</i>									1
<i>Dasyatis americana</i>									
<i>Decapterus macarellus</i>									
<i>Equetus acuminatus</i>									
<i>Equetus lanceolatus</i>									
<i>Equetus umbrosus</i>									
<i>Ginglymostoma cirratum</i>									
<i>Haemulon aurolineatum</i>									
<i>Halichoeres bivittatus</i>									
<i>Lactophrys quadricornis</i>									
<i>Lagadon rhomboides</i>									
<i>Lutjanus synagris</i>	1	6	7		15	3	18	1	1
<i>Monacanthus hispidus</i>									
<i>Paralichthys albigutta</i>									
<i>Priacanthus arenatus</i>									
<i>Rachycentron canadum</i>									
<i>Rhomboplites aurorubens</i>	5	2	7		1		1	3	
<i>Scomberomorus cavalla</i>									
<i>Sphyraena barracuda</i>				1					
<i>Apogon sp.</i>									
<i>Calamus sp.</i>									1
Monacanthidae sp.									
Serranidae sp.									
unidentified small fishes									

Table 10. Summer 2005 fish counts continued.

Species	C22	C25	C32	C36a	C36b	C36T	C39
<i>Balistes capriscus</i>	2	4	15	7	25	32	9
<i>Epinephelus morio</i>	2		1	1	1	2	
<i>Holacanthus bermudensis</i>							
<i>Lutjanus campechanus</i>	44	63		108	191	299	47
<i>Lutjanus griseus</i>			1		4	4	
<i>Mycteroperca microlepis</i>			1	1	1	2	
<i>Mycteroperca phenax</i>	5				3	3	
<i>Pagrus pagrus</i>							
<i>Rypticus maculatus</i>	1	1	3		1	1	1
<i>Seriola spp.</i>	1	7	28	2	21	23	1
<i>Seriola rivoliana</i>					1	1	
<i>Apogon psuedomaculatus</i>							
<i>Aluterus monoceros</i>							
<i>Aluterus heudeloti</i>							
<i>Aluterus schoepfi</i>			2				
<i>Calamus leucosteus</i>							
<i>Caranx crysos</i>	50						2
<i>Carcharhinus limbatus</i>							
<i>Carcharhinus plum beus</i>							
<i>Centropristis ocyurus</i>		6					
<i>Chaetodipterus faber</i>							1
<i>Dasyatis americana</i>							
<i>Decapterus macarellus</i>							
<i>Equetus acuminatus</i>							
<i>Equetus lanceolatus</i>							
<i>Equetus umbrosus</i>							
<i>Ginglymostoma cirratum</i>							
<i>Haemulon aurolineatum</i>		40					
<i>Halichoeres bivittatus</i>							2
<i>Lactophrys quadricornis</i>							
<i>Lagadon rhomboides</i>							
<i>Lutjanus synagris</i>		11	1				
<i>Monacanthus hispidus</i>							
<i>Paralichthys albigutta</i>							
<i>Priacanthus arenatus</i>							
<i>Rachycentron canadum</i>							
<i>Rhomboplites aurorubens</i>	1	6					
<i>Scomberomorus cavalla</i>	1						
<i>Sphyrnaena barracuda</i>							
<i>Apogon sp.</i>							
<i>Calamus sp.</i>							
Monacanthidae sp.							
Serranidae sp.							
unidentified small fishes			136				

Table 11. Water parameters measured one meter off bottom at study sites during September 2005 sampling with a YSI 85 dissolved oxygen, conductivity, salinity, and temperature sensor.

Date	Station	Station Depth	Salinity psu	Temp. °C	D.O. mg/l
9/29/2005	A20	33.5	35.5	29.4	5.87
9/27/2005	B2	29.5	34.6	28.9	5.63
9/29/2005	C25	37.0	35.5	29.4	6.19
9/27/2005	C32	29.5	35.0	28.7	5.68

Table 12. Size and release condition data for fish tagged over sampling reefs. Lengths are total lengths in mm except fork length is reported for *Balistes capriscus*. Under comments, SE = distended esophagus due to swim bladder expansion , BO = intestine protruding from anus, and BE= eyes bulging from pressure effects. Fish caught on sow rigs are indicated. See text for release condition descriptions.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
1	3/26/2005	B2	<i>Balistes capriscus</i>	445	1	
2	3/26/2005	B2	<i>Lutjanus campechanus</i>	430	1	
3	3/26/2005	B2	<i>Epinephelus morio</i>	646	1	
4	3/26/2005	B2	<i>Lutjanus campechanus</i>	415	2	
5	3/26/2005	B2	<i>Epinephelus morio</i>	595	2	Caught on sow rig
6	3/26/2005	B2	<i>Balistes capriscus</i>	314	1	
7	3/26/2005	B2	<i>Balistes capriscus</i>	341	1	
8	3/26/2005	B2	<i>Lutjanus campechanus</i>	405	1	
9	3/26/2005	B2	<i>Lutjanus campechanus</i>	450	3	SE
10	3/26/2005	B2	<i>Balistes capriscus</i>	340	1	
11	3/26/2005	B2	<i>Balistes capriscus</i>	325	1	
12	3/26/2005	B2	<i>Balistes capriscus</i>	332	1	
13	3/26/2005	B2	<i>Balistes capriscus</i>	353	1	
14	3/26/2005	B2	<i>Mycteroperca microlepis</i>	635	1	Swallowed hook, caught on sow rig
15	3/26/2005	B2	<i>Balistes capriscus</i>	350	1	
16	3/26/2005	B2	<i>Balistes capriscus</i>	315	1	
17	3/26/2005	B2	<i>Lutjanus campechanus</i>	382	1	
18	3/26/2005	B2	<i>Pagrus pagrus</i>	278	1	BO
19	3/26/2005	B2	<i>Mycteroperca microlepis</i>	492	1	
20	3/26/2005	B2	<i>Epinephelus morio</i>	582	3	BE
21	3/26/2005	B2	<i>Epinephelus morio</i>	592	3	
22	3/26/2005	B2	<i>Lutjanus campechanus</i>	558	1	Caught on sow rig
23	3/26/2005	B2	<i>Balistes capriscus</i>	358	1	
24	3/26/2005	B2	<i>Epinephelus morio</i>	467	1	
25	3/26/2005	B2	<i>Epinephelus morio</i>	380	1	
26	3/26/2005	B2	<i>Mycteroperca microlepis</i>	487	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
27	3/26/2005	B2	<i>Balistes capriscus</i>	482	1	
28	3/26/2005	B2	<i>Epinephelus morio</i>	585	1	Caught on sow rig
29	3/26/2005	B2	<i>Lutjanus campechanus</i>	515	1	
30	3/26/2005	B2	<i>Lutjanus campechanus</i>	540	1	
31	3/26/2005	B2	<i>Pagrus pagrus</i>	309	1	
32	3/26/2005	B2	<i>Lutjanus campechanus</i>	365	1	
33	3/26/2005	B2	<i>Pagrus pagrus</i>	348	1	
34	3/26/2005	B2	<i>Pagrus pagrus</i>	338	1	
35	3/26/2005	B2	<i>Lutjanus campechanus</i>	368	1	
36	3/26/2005	B2	<i>Pagrus pagrus</i>	312	1	
37	3/26/2005	B2	<i>Pagrus pagrus</i>	315	1	
38	3/26/2005	B2	<i>Pagrus pagrus</i>	312	2	
39	3/26/2005	B2	<i>Lutjanus campechanus</i>	404	1	BO
40	3/26/2005	B2	<i>Balistes capriscus</i>	353	1	
41	3/26/2005	B2	<i>Epinephelus morio</i>	512	1	
42	3/26/2005	B2	<i>Balistes capriscus</i>	327	1	
43	3/26/2005	B2	<i>Epinephelus morio</i>	474	1	
44	3/26/2005	B2	<i>Balistes capriscus</i>	345	1	
45	3/26/2005	C15	<i>Balistes capriscus</i>	352	1	
46	3/26/2005	C15	<i>Pagrus pagrus</i>	309	3	
47	3/26/2005	C15	<i>Balistes capriscus</i>	307	1	
48	3/26/2005	C15	<i>Mycteroperca microlepis</i>	451	1	
49	3/26/2005	C15	<i>Balistes capriscus</i>	395	1	
50	3/26/2005	C15	<i>Lutjanus campechanus</i>	373	1	
51	3/26/2005	C15	<i>Balistes capriscus</i>	296	1	
52	3/26/2005	C15	<i>Balistes capriscus</i>	307	1	
53	3/26/2005	C15	<i>Pagrus pagrus</i>	310	1	
54	3/26/2005	C15	<i>Balistes capriscus</i>	318	1	
55	3/26/2005	C15	<i>Mycteroperca microlepis</i>	493	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
56	3/26/2005	C15	<i>Mycteroperca microlepis</i>	600	1	
57	3/26/2005	C15	<i>Mycteroperca microlepis</i>	430	1	
58	3/26/2005	C15	<i>Lutjanus campechanus</i>	355	1	
59	3/26/2005	C15	<i>Lutjanus campechanus</i>	385	3	
60	3/26/2005	C15	<i>Mycteroperca microlepis</i>	500	1	SE
61	3/26/2005	C15	<i>Balistes capriscus</i>	350	1	
62	3/26/2005	C15	<i>Mycteroperca microlepis</i>	444	1	
63	3/26/2005	C15	<i>Lutjanus campechanus</i>	357	1	
64	3/26/2005	C15	<i>Pagrus pagrus</i>	326	3	
65	3/26/2005	C15	<i>Lutjanus campechanus</i>	386	1	
66	3/26/2005	C15	<i>Balistes capriscus</i>	355	1	
67	3/26/2005	C15	<i>Mycteroperca microlepis</i>	564	1	Caught on sow rig
68	3/26/2005	C15	<i>Balistes capriscus</i>	319	1	
69	3/26/2005	C15	<i>Balistes capriscus</i>	296	1	
70	3/26/2005	C15	<i>Mycteroperca microlepis</i>	455	1	SE
71	3/26/2005	C15	<i>Mycteroperca microlepis</i>	424	1	
72	3/26/2005	C15	<i>Mycteroperca microlepis</i>	573	1	SE
73	3/26/2005	C15	<i>Mycteroperca microlepis</i>	670	1	SE
74	3/26/2005	C15	<i>Mycteroperca microlepis</i>	601	1	
75	3/26/2005	C15	<i>Mycteroperca microlepis</i>	460	1	
69	3/26/2005	C15	<i>Balistes capriscus</i>	296	1	
70	3/26/2005	C15	<i>Mycteroperca microlepis</i>	455	1	SE
71	3/26/2005	C15	<i>Mycteroperca microlepis</i>	424	1	
72	3/26/2005	C15	<i>Mycteroperca microlepis</i>	573	1	SE
73	3/26/2005	C15	<i>Mycteroperca microlepis</i>	670	1	SE
74	3/26/2005	C15	<i>Mycteroperca microlepis</i>	601	1	
75	3/26/2005	C15	<i>Mycteroperca microlepis</i>	460	1	
76	3/26/2005	C15	<i>Lutjanus campechanus</i>	377	3	BE

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
77	3/26/2005	C15	<i>Mycteroperca microlepis</i>	572	1	Lost tag
78	3/26/2005	C15	<i>Balistes capriscus</i>	336	1	
79	3/26/2005	C15	<i>Pagrus pagrus</i>	392	1	
80	3/26/2005	C15	<i>Pagrus pagrus</i>	265	1	
81	3/26/2005	C15	<i>Mycteroperca microlepis</i>	472	1	
82	3/26/2005	C15	<i>Lutjanus campechanus</i>	386	1	
83	3/26/2005	C15	<i>Mycteroperca microlepis</i>	470	1	
84	3/26/2005	C15	<i>Pagrus pagrus</i>	296	1	
85	3/26/2005	C15	<i>Pagrus pagrus</i>	322	1	
86	3/26/2005	C15	<i>Pagrus pagrus</i>	336	1	
87	3/26/2005	C15	<i>Rhomboplites aurorubens</i>	386	1	
88	3/26/2005	C15	<i>Mycteroperca microlepis</i>	450	1	
89	3/26/2005	C15	<i>Mycteroperca microlepis</i>	497	1	
90	3/26/2005	C15	<i>Mycteroperca microlepis</i>	481	1	
91	3/26/2005	C15	<i>Pagrus pagrus</i>	313	1	
92	3/26/2005	C15	<i>Pagrus pagrus</i>	261	1	
93	3/26/2005	C15	<i>Pagrus pagrus</i>	312	1	
94	3/26/2005	C15	<i>Pagrus pagrus</i>	291	1	
95	3/26/2005	C15	<i>Pagrus pagrus</i>	336	1	
96	3/26/2005	C15	<i>Pagrus pagrus</i>	285	1	
97	3/26/2005	C15	<i>Lutjanus campechanus</i>	357	1	
98	3/26/2005	C15	<i>Mycteroperca microlepis</i>	503	1	Caught on sow rig
99	3/26/2005	C15	<i>Lutjanus campechanus</i>	336	1	
100	3/26/2005	C15	<i>Epinephelus morio</i>	500	1	SE
101	3/26/2005	C15	<i>Balistes capriscus</i>	356	1	
102	3/26/2005	C15	<i>Mycteroperca microlepis</i>	427	1	
103	3/26/2005	C15	<i>Mycteroperca microlepis</i>	720	1	SE, caught on sow rig
104	3/26/2005	C15	<i>Pagrus pagrus</i>	312	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
105	3/26/2005	C15	<i>Pagrus pagrus</i>	322	1	
106	3/26/2005	C15	<i>Pagrus pagrus</i>	287	1	
107	3/26/2005	C15	<i>Pagrus pagrus</i>	304	1	
108	3/26/2005	C15	<i>Pagrus pagrus</i>	292	1	
109	3/26/2005	C15	<i>Pagrus pagrus</i>	308	1	
110	3/26/2005	C15	<i>Pagrus pagrus</i>	271	2	
111	3/26/2005	A20	<i>Balistes capriscus</i>	302	1	
112	3/26/2005	A20	<i>Balistes capriscus</i>	352	1	
113	3/26/2005	A20	<i>Pagrus pagrus</i>	365	1	
114	3/26/2005	A20	<i>Balistes capriscus</i>	297	1	
115	3/26/2005	A20	<i>Balistes capriscus</i>	283	1	
116	3/26/2005	A20	<i>Balistes capriscus</i>	289	1	
117	3/26/2005	A20	<i>Pagrus pagrus</i>	330	1	
118	3/26/2005	A20	<i>Balistes capriscus</i>	360	1	
119	3/26/2005	A20	<i>Pagrus pagrus</i>	308	1	
120	3/26/2005	A34	<i>Lutjanus campechanus</i>	430	1	Tag used out of order
121	3/26/2005	A20	<i>Rhomboplites aurorubens</i>	324	1	
122	3/26/2005	A20	<i>Balistes capriscus</i>	264	1	
123	3/26/2005	A20	<i>Pagrus pagrus</i>	321	1	
124	3/26/2005	A20	<i>Pagrus pagrus</i>	315	1	
125	3/26/2005	A20	<i>Pagrus pagrus</i>	302	1	paused at 12min 12 sec.; lightning
126	3/26/2005	A20	<i>Pagrus pagrus</i>	316	1	
127	3/26/2005	A20	<i>Lutjanus campechanus</i>	403	1	
128	3/26/2005	A20	<i>Mycteroperca microlepis</i>	540	1	
129	3/26/2005	A20	<i>Balistes capriscus</i>	239	1	
130	3/26/2005	A20	<i>Mycteroperca microlepis</i>	486	1	
131	3/26/2005	A20	<i>Pagrus pagrus</i>	333	1	
132	3/26/2005	A20	<i>Mycteroperca microlepis</i>	572	1	Sow rig, SE; lightning, fished only 22:54
133	3/26/2005	B9	<i>Lutjanus campechanus</i>	392	1	SE

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
134	3/26/2005	B9	<i>Lutjanus campechanus</i>	367	1	SE
135	3/26/2005	B9	<i>Mycteroperca microlepis</i>	637	1	SE
136	3/26/2005	B9	<i>Lutjanus campechanus</i>	380	1	SE
137	3/26/2005	B9	<i>Lutjanus campechanus</i>	419	1	
138	3/26/2005	B9	<i>Balistes capriscus</i>	327	1	
139	3/26/2005	B9	<i>Balistes capriscus</i>	277	1	
140	3/26/2005	B9	<i>Balistes capriscus</i>	313	1	
140	6/9/2005	B9	<i>Balistes capriscus</i>	318	1	Dophin seen again
141	3/26/2005	B9	<i>Lutjanus campechanus</i>	373	1	SE
142	3/26/2005	B9	<i>Balistes capriscus</i>	322	1	
143	3/26/2005	B9	<i>Lutjanus campechanus</i>	424	1	SE
144	3/26/2005	B9	<i>Lutjanus campechanus</i>	375	1	
145	3/26/2005	B9	<i>Lutjanus campechanus</i>	410	1	SE
146	3/26/2005	B9	<i>Lutjanus campechanus</i>	388	1	SE
147	3/26/2005	B9	<i>Lutjanus campechanus</i>	392	1	BO
148	3/26/2005	B9	<i>Lutjanus campechanus</i>	366	1	SE
149	3/26/2005	B9	<i>Mycteroperca microlepis</i>	458	1	
150	3/26/2005	B9	<i>Lutjanus campechanus</i>	421	1	SE
151	3/26/2005	B9	<i>Lutjanus campechanus</i>	386	1	SE
152	3/26/2005	B9	<i>Lutjanus campechanus</i>	431	1	SE
153	3/26/2005	B9	<i>Lutjanus campechanus</i>	347	4	
154	3/26/2005	B9	<i>Balistes capriscus</i>	393	1	
155	3/26/2005	B9	<i>Balistes capriscus</i>	293	1	
156	3/26/2005	B9	<i>Balistes capriscus</i>	362	1	
157	3/26/2005	B9	<i>Mycteroperca microlepis</i>	440	1	SE
158	3/26/2005	B9	<i>Balistes capriscus</i>	302	1	
159	3/26/2005	B9	<i>Balistes capriscus</i>	287	1	BE
160	3/26/2005	B9	<i>Lutjanus campechanus</i>	387	2	SE
161	3/26/2005	B9	<i>Lutjanus campechanus</i>	361	2	BO

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
162	3/26/2005	B9	<i>Epinephelus morio</i>	672	1	BE, caught on sow rig
163	3/26/2005	B9	<i>Balistes capriscus</i>	331	1	
164	3/26/2005	B9	<i>Lutjanus campechanus</i>	325	3	
165	3/26/2005	B9	<i>Lutjanus campechanus</i>	345	1	
166	3/26/2005	B9	<i>Balistes capriscus</i>	281	1	
167	3/26/2005	B9	<i>Mycteroperca microlepis</i>	671	1	SE
168	3/26/2005	B9	<i>Mycteroperca microlepis</i>	532	1	Gill tear, caught on sow rig
169	3/26/2005	B9	<i>Balistes capriscus</i>	304	1	
170	3/26/2005	B9	<i>Mycteroperca microlepis</i>	816	2	SE
171	3/26/2005	B9	<i>Mycteroperca microlepis</i>	414	1	
172	3/26/2005	B9	<i>Lutjanus campechanus</i>	343	1	BO
173	3/26/2005	B9	<i>Lutjanus campechanus</i>	327	2	SE
174	3/26/2005	B9	<i>Mycteroperca microlepis</i>	668	1	SE
175	3/26/2005	B9	<i>Lutjanus campechanus</i>	363	1	BO
176	3/26/2005	B9	<i>Lutjanus campechanus</i>	381	2	
177	3/26/2005	C21	<i>Balistes capriscus</i>	326	1	
178	3/26/2005	C21	<i>Lutjanus campechanus</i>	324	2	
179	3/26/2005	C21	<i>Pagrus pagrus</i>	357	1	
180	3/26/2005	C21	<i>Lutjanus campechanus</i>	390	1	
181	3/26/2005	C21	<i>Lutjanus campechanus</i>	346	1	SE
182	3/26/2005	C21	<i>Lutjanus campechanus</i>	376	1	
183	3/26/2005	C21	<i>Lutjanus campechanus</i>	372	1	
184	3/26/2005	C21	<i>Lutjanus campechanus</i>	405	1	Caught on sow rig
185	3/26/2005	C21	<i>Mycteroperca microlepis</i>	571	1	
186	3/26/2005	C21	<i>Lutjanus campechanus</i>	320	1	BO
187	3/26/2005	C21	<i>Balistes capriscus</i>	302	1	
188	3/26/2005	C21	<i>Lutjanus campechanus</i>	322	1	BO
189	3/26/2005	C21	<i>Balistes capriscus</i>	292	1	
190	3/26/2005	C21	<i>Lutjanus campechanus</i>	359	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
191	3/26/2005	C21	<i>Pagrus pagrus</i>	313	1	
192	3/26/2005	C21	<i>Lutjanus campechanus</i>	405	1	SE, caught on sow rig
193	3/26/2005	C21	<i>Lutjanus campechanus</i>	376	1	
194	3/26/2005	C21	<i>Mycteroperca microlepis</i>	448	1	BE
195	3/26/2005	C21	<i>Lutjanus campechanus</i>	323	2	SE
196	3/26/2005	C21	<i>Lutjanus campechanus</i>	303	1	
197	3/26/2005	C21	<i>Epinephelus morio</i>	472	1	BE
198	3/26/2005	C21	<i>Balistes capriscus</i>	280	1	
199	3/26/2005	C21	<i>Balistes capriscus</i>	291	1	
200	3/26/2005	C21	<i>Balistes capriscus</i>	290	1	
201	3/26/2005	C21	<i>Pagrus pagrus</i>	309	2	
202	3/26/2005	C21	<i>Pagrus pagrus</i>	345	1	
203	3/26/2005	C21	<i>Balistes capriscus</i>	313	1	
204	3/26/2005	C21	<i>Lutjanus campechanus</i>	347	2	BO
205	3/26/2005	C21	<i>Pagrus pagrus</i>	303	2	
206	3/26/2005	C21	<i>Balistes capriscus</i>	332	1	
207	3/26/2005	C21	<i>Lutjanus campechanus</i>	373	1	SE
208	3/26/2005	C21	<i>Mycteroperca microlepis</i>	532	1	SE, caught on sow rig
209	3/26/2005	C21	<i>Pagrus pagrus</i>	330	1	
210	3/26/2005	C21	<i>Lutjanus campechanus</i>	313	1	SE
211	3/26/2005	C21	<i>Lutjanus campechanus</i>	313	1	
212	3/26/2005	C21	<i>Pagrus pagrus</i>	328	1	
213	3/26/2005	C21	<i>Pagrus pagrus</i>	314	1	
214	3/26/2005	C21	<i>Epinephelus morio</i>	458	1	BE
215	3/26/2005	C21	<i>Epinephelus morio</i>	348	1	SE
216	3/26/2005	C21	<i>Mycteroperca microlepis</i>	496	1	
217	3/26/2005	C21	<i>Lutjanus campechanus</i>	335	2	
218	3/26/2005	C21	<i>Epinephelus morio</i>	460	1	
219	3/26/2005	C21	<i>Mycteroperca microlepis</i>	479	3	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
220	3/26/2005	C21	<i>Mycteroperca microlepis</i>	646	1	Sow rig on a porgy
221	3/26/2005	C21	<i>Balistes caprisus</i>	311	1	
222	3/26/2005	A34	<i>Lutjanus campechanus</i>	450	1	BO
223	3/26/2005	A34	<i>Lutjanus campechanus</i>	420	1	SE
224	3/26/2005	A34	<i>Lutjanus campechanus</i>	390	1	SE
225	3/26/2005	A34	<i>Lutjanus campechanus</i>	316	3	
226	3/26/2005	A34	<i>Lutjanus campechanus</i>	365	3	SE
227	3/26/2005	A34	<i>Lutjanus campechanus</i>	416	1	
228	3/26/2005	A34	<i>Lutjanus campechanus</i>	343	1	SE
229	3/26/2005	A34	<i>Lutjanus campechanus</i>	352	2	
230	3/26/2005	A34	<i>Lutjanus campechanus</i>	386	2	
231	3/26/2005	A34	<i>Lutjanus campechanus</i>	342	3	
232	3/26/2005	A34	<i>Lutjanus campechanus</i>	436	2	
233	3/26/2005	A34	<i>Lutjanus campechanus</i>	375	2	
234	3/26/2005	A34	<i>Lutjanus campechanus</i>	426	2	
235	3/26/2005	A34	<i>Lutjanus campechanus</i>	373	2	
236	3/26/2005	A34	<i>Lutjanus campechanus</i>	425	2	
237	3/26/2005	A34	<i>Lutjanus campechanus</i>	370	1	
238	3/26/2005	A34	<i>Lutjanus campechanus</i>	387	1	SE, caught on sow rig
239	3/26/2005	A34	<i>Lutjanus campechanus</i>	336	2	SE
240	3/26/2005	A34	<i>Lutjanus campechanus</i>	356	2	
241	3/26/2005	A34	<i>Lutjanus campechanus</i>	306	3	Caught on sow rig
242	3/26/2005	A34	<i>Lutjanus campechanus</i>	346	1	BO
243	3/26/2005	A34	<i>Lutjanus campechanus</i>	403	2	
244	3/26/2005	A34	<i>Lutjanus campechanus</i>	308	1	SE
245	3/26/2005	A34	<i>Lutjanus campechanus</i>	330	1	SE
246	3/26/2005	A34	<i>Lutjanus campechanus</i>	315	1	SE
247	3/26/2005	A34	<i>Lutjanus campechanus</i>	397	1	SE
248	3/26/2005	A34	<i>Lutjanus campechanus</i>	359	1	SE

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
249	3/26/2005	A34	<i>Lutjanus campechanus</i>	302	1	
250	3/26/2005	A34	<i>Lutjanus campechanus</i>	303	1	SE
251	3/26/2005	A34	<i>Lutjanus campechanus</i>	350	1	
252	3/26/2005	A34	<i>Lutjanus campechanus</i>	400	1	SE
253	3/26/2005	A34	<i>Lutjanus campechanus</i>	320	1	SE
254	3/26/2005	A34	<i>Lutjanus campechanus</i>	383	1	SE
255	3/26/2005	A34	<i>Lutjanus campechanus</i>	320	1	
256	3/26/2005	A34	<i>Lutjanus campechanus</i>	333	1	SE
257	3/26/2005	A34	<i>Lutjanus campechanus</i>	370	2	SE
258	3/26/2005	A34	<i>Lutjanus campechanus</i>	396	1	
259	3/26/2005	A34	<i>Lutjanus campechanus</i>	352	1	SE
260	3/26/2005	A34	<i>Lutjanus campechanus</i>	392	1	Caught on sow rig
261	3/26/2005	A34	<i>Lutjanus campechanus</i>	338	2	SE
262	3/26/2005	A34	<i>Lutjanus campechanus</i>	305	2	
263	3/26/2005	A34	<i>Lutjanus campechanus</i>	354	1	SE
264	3/26/2005	A34	<i>Lutjanus campechanus</i>	474	2	SE
265	3/26/2005	A34	<i>Lutjanus campechanus</i>	324	1	
266	3/26/2005	A34	<i>Lutjanus campechanus</i>	350	1	SE
267	3/26/2005	A34	<i>Lutjanus campechanus</i>	342	1	SE
268	3/26/2005	A34	<i>Lutjanus campechanus</i>	357	1	
269	3/26/2005	A34	<i>Lutjanus campechanus</i>	335	2	
270	3/26/2005	A34	<i>Lutjanus campechanus</i>	310	1	
271	3/26/2005	A34	<i>Lutjanus campechanus</i>	318	1	BO
272	3/26/2005	A34	<i>Lutjanus campechanus</i>	326	1	
273	3/26/2005	A34	<i>Lutjanus campechanus</i>	305	1	
274	3/26/2005	A34	<i>Lutjanus campechanus</i>	325	1	BO
275	3/26/2005	A34	<i>Lutjanus campechanus</i>	340	1	BO
276	3/26/2005	A34	<i>Mycteroperca microlepis</i>	696	1	SE
277	3/26/2005	A34	<i>Lutjanus campechanus</i>	307	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
278	3/26/2005	A34	<i>Lutjanus campechanus</i>	316	1	
279	3/26/2005	A34	<i>Lutjanus campechanus</i>	330	1	
280	3/26/2005	A34	<i>Lutjanus campechanus</i>	290	1	
281	3/26/2005	C32	<i>Epinephelus morio</i>	561	1	SE
282	3/26/2005	C32	<i>Epinephelus morio</i>	479	1	SE
283	3/26/2005	C32	<i>Mycteroperca microlepis</i>	515	3	
284	3/26/2005	C32	<i>Lutjanus campechanus</i>	436	1	
285	3/26/2005	C32	<i>Epinephelus morio</i>	545	1	Caught on sow rig
286	3/26/2005	C32	<i>Balistes capriscus</i>	400	1	
287	3/26/2005	C32	<i>Epinephelus morio</i>	395	1	
288	3/26/2005	C32	<i>Mycteroperca phenax</i>	450	2	
289	3/26/2005	C32	<i>Epinephelus morio</i>	658	3	SE
290	3/26/2005	C32	<i>Epinephelus morio</i>	500	1	SE
291	3/26/2005	C32	<i>Mycteroperca microlepis</i>	460	1	
292	3/26/2005	C32	<i>Epinephelus morio</i>	464	1	SE
293	3/26/2005	C32	<i>Mycteroperca phenax</i>	420	1	
294	3/26/2005	C32	<i>Lutjanus campechanus</i>	378	1	BO
295	3/26/2005	C32	<i>Mycteroperca microlepis</i>	775	1	
296	3/26/2005	C32	<i>Lutjanus campechanus</i>	590	1	SE
297	3/26/2005	C32	<i>Lutjanus campechanus</i>	405	4	
298	3/26/2005	C32	<i>Lutjanus campechanus</i>	365	1	
299	3/26/2005	C32	<i>Lutjanus campechanus</i>	360	1	SE
300	3/26/2005	C32	<i>Mycteroperca phenax</i>	395	1	
301	3/26/2005	C32	<i>Mycteroperca microlepis</i>	575	1	SE
302	3/26/2005	C32	<i>Mycteroperca microlepis</i>	475	1	SE
303	3/26/2005	C32	<i>Lutjanus campechanus</i>	366	2	
304	3/26/2005	C32	<i>Mycteroperca microlepis</i>	520	1	
305	3/26/2005	C32	<i>Mycteroperca microlepis</i>	472	1	
306	3/26/2005	C32	<i>Epinephelus morio</i>	492	1	SE
307	3/26/2005	C32	<i>Epinephelus morio</i>	493	1	SE

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
308	3/26/2005	C32	<i>Mycteroperca phenax</i>	340	1	
309	3/26/2005	C32	<i>Lutjanus campechanus</i>	375	2	
310	3/26/2005	C32	<i>Lutjanus campechanus</i>	367	1	
311	3/26/2005	C32	<i>Balistes capriscus</i>	340	1	BO
312	3/26/2005	C32	<i>Lutjanus campechanus</i>	326	1	
313	3/26/2005	C32	<i>Mycteroperca phenax</i>	397	1	
314	3/26/2005	C32	<i>Lutjanus campechanus</i>	394	2	
315	3/26/2005	C32	<i>Epinephelus morio</i>	365	1	
316	3/26/2005	B8	<i>Lutjanus campechanus</i>	502	1	
317	3/26/2005	B8	<i>Lutjanus campechanus</i>	460	2	
318	3/26/2005	B8	<i>Lutjanus campechanus</i>	487	1	
319	3/26/2005	B8	<i>Lutjanus campechanus</i>	438	1	SE
320	3/26/2005	B8	<i>Lutjanus campechanus</i>	528	2	SE
321	3/26/2005	B8	<i>Lutjanus campechanus</i>	545	2	
322	3/26/2005	B8	<i>Lutjanus campechanus</i>	420	1	
323	3/26/2005	B8	<i>Lutjanus campechanus</i>	449	3	
324	3/26/2005	B8	<i>Lutjanus campechanus</i>	411	1	
325	3/26/2005	B8	<i>Lutjanus campechanus</i>	380	2	
326	3/26/2005	B8	<i>Lutjanus campechanus</i>	464	1	
327	3/26/2005	B8	<i>Lutjanus campechanus</i>	364	1	
328	3/26/2005	B8	<i>Lutjanus campechanus</i>	394	1	
329	3/26/2005	B8	<i>Lutjanus campechanus</i>	436	1	
330	3/26/2005	B8	<i>Lutjanus campechanus</i>	391	1	
331	3/26/2005	B8	<i>Lutjanus campechanus</i>	380	2	
332	3/26/2005	B8	<i>Lutjanus campechanus</i>	370	1	
333	3/26/2005	B8	<i>Lutjanus campechanus</i>	375	2	SE
334	3/26/2005	B8	<i>Lutjanus campechanus</i>	405	3	
335	3/26/2005	B8	<i>Lutjanus campechanus</i>	360	1	BO

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
336	3/26/2005	B8	<i>Mycteroperca microlepis</i>	496	1	
337	3/26/2005	B8	<i>Lutjanus campechanus</i>	394	1	
338	3/26/2005	B8	<i>Lutjanus campechanus</i>	476	1	
339	3/26/2005	B8	<i>Lutjanus campechanus</i>	355	1	
340	3/26/2005	B8	<i>Balistes capriscus</i>	306	1	
341	3/26/2005	B8	<i>Balistes capriscus</i>	343	1	
342	3/26/2005	B8	<i>Lutjanus campechanus</i>	404	1	
343	3/26/2005	B8	<i>Balistes capriscus</i>	390	1	
344	3/26/2005	B8	<i>Balistes capriscus</i>	521	1	
345	3/26/2005	B8	<i>Lutjanus campechanus</i>	336	2	BO
346	3/26/2005	B8	<i>Balistes capriscus</i>	490	1	BO
347	3/26/2005	B8	<i>Balistes capriscus</i>	322	1	
348	3/26/2005	B8	<i>Balistes capriscus</i>	390	1	
349	3/26/2005	B8	<i>Balistes capriscus</i>	435	1	
350	3/26/2005	A12	<i>Lutjanus campechanus</i>	358	1	BO
351	3/26/2005	A12	<i>Lutjanus campechanus</i>	360	1	
352	3/26/2005	A12	<i>Lutjanus campechanus</i>	332	2	
353	3/26/2005	A12	<i>Lutjanus campechanus</i>	508	1	BO, caught on sow rig
354	3/26/2005	A12	<i>Lutjanus campechanus</i>	349	2	BO
355	3/26/2005	A12	<i>Lutjanus campechanus</i>	362	1	
356	3/26/2005	A12	<i>Lutjanus campechanus</i>	388	1	
357	3/26/2005	A12	<i>Lutjanus campechanus</i>	384	1	
358	3/26/2005	A12	<i>Mycteroperca microlepis</i>	438	1	
359	3/26/2005	A12	<i>Lutjanus campechanus</i>	465	1	
360	3/26/2005	A12	<i>Mycteroperca microlepis</i>	522	1	
361	3/26/2005	A12	<i>Lutjanus campechanus</i>	466	1	
362	3/26/2005	A12	<i>Lutjanus campechanus</i>	355	1	
363	3/26/2005	A12	<i>Mycteroperca microlepis</i>	647	1	Bleeding
364	3/26/2005	A12	<i>Mycteroperca phenax</i>	396	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
365	3/26/2005	A12	<i>Mycteroperca microlepis</i>	477	1	
366	3/26/2005	A12	<i>Balistes capriscus</i>	375	1	
367	3/26/2005	A12	<i>Lutjanus campechanus</i>	387	2	
368	3/26/2005	A12	<i>Mycteroperca microlepis</i>	517	1	
369	3/26/2005	A12	<i>Lutjanus campechanus</i>	359	1	
370	3/26/2005	A12	<i>Lutjanus campechanus</i>	348	1	BO
371	3/26/2005	A12	<i>Lutjanus campechanus</i>	345	1	BO
372	3/26/2005	A12	<i>Mycteroperca microlepis</i>	417	1	
373	3/26/2005	A12	<i>Lutjanus campechanus</i>	446	1	
374	3/26/2005	A12	<i>Mycteroperca phenax</i>	337	1	
375	3/26/2005	A12	<i>Lutjanus campechanus</i>	342	1	SE
376	3/26/2005	A12	<i>Mycteroperca microlepis</i>	425	1	
377	6/9/2005	C32	<i>Mycteroperca microlepis</i>	445	1	
378	6/9/2005	C32	<i>Mycteroperca microlepis</i>	620	1	
379	6/9/2005	C32	<i>Balistes capriscus</i>	310	1	
380	6/9/2005	C32	<i>Mycteroperca microlepis</i>	493	1	
381	6/9/2005	C32	<i>Balistes capriscus</i>	350	1	
382	6/9/2005	C32	<i>Balistes capriscus</i>	310	1	
383	6/9/2005	C32	<i>Mycteroperca microlepis</i>	436	1	
384	6/9/2005	B8	<i>Lutjanus campechanus</i>	395	1	
385	6/9/2005	B8	<i>Balistes capriscus</i>	305	1	
386	6/9/2005	B8	<i>Lutjanus campechanus</i>	547	3	
387	6/9/2005	B8	<i>Lutjanus campechanus</i>	615	3	BO
388	6/9/2005	B8	<i>Lutjanus campechanus</i>	440	1	Sow rig
390	6/9/2005	B8	<i>Lutjanus campechanus</i>	421	2	(tag 389 was lost)
391	6/9/2005	B8	<i>Balistes capriscus</i>	376	3	BO
392	6/9/2005	B8	<i>Lutjanus campechanus</i>	382	1	
393	6/9/2005	B8	<i>Lutjanus campechanus</i>	320	3	
394	6/9/2005	B8	<i>Lutjanus campechanus</i>	602	3	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
395	6/9/2005	B8	<i>Lutjanus campechanus</i>	530	1	Sow rig
396	6/9/2005	B8	<i>Balistes capriscus</i>	315	1	
397	6/9/2005	B8	<i>Lutjanus campechanus</i>	412	1	
398	6/9/2005	B8	<i>Lutjanus campechanus</i>	577	1	
399	6/9/2005	B8	<i>Lutjanus campechanus</i>	550	1	Sow rig
400	6/9/2005	B8	<i>Balistes capriscus</i>	365	2	
401	6/9/2005	B8	<i>Mycteroperca phenax</i>	405	2	
402	6/9/2005	B8	<i>Mycteroperca phenax</i>	445	1	
403	6/9/2005	B8	<i>Lutjanus campechanus</i>	467	3	
404	6/9/2005	B8	<i>Lutjanus campechanus</i>	480	1	
405	6/9/2005	B8	<i>Mycteroperca phenax</i>	617	1	
406	6/9/2005	B8	<i>Balistes capriscus</i>	405	1	BO
407	6/9/2005	B8	<i>Lutjanus campechanus</i>	380	4	
408	6/9/2005	B8	<i>Lutjanus campechanus</i>	360	1	
409	6/9/2005	B8	<i>Lutjanus campechanus</i>	538	3	
410	6/9/2005	B8	<i>Lutjanus campechanus</i>	430	1	BO
411	6/9/2005	B8	<i>Balistes capriscus</i>	330	3	
412	6/9/2005	B8	<i>Balistes capriscus</i>	296	1	BO
413	6/9/2005	B8	<i>Balistes capriscus</i>	365	1	
414	6/9/2005	B8	<i>Balistes capriscus</i>	390	1	BO
415	6/9/2005	B8	<i>Lutjanus campechanus</i>	375	4	Bleeding
416	6/9/2005	B8	<i>Lutjanus campechanus</i>	345	1	
417	6/9/2005	B8	<i>Lutjanus campechanus</i>	497	4	
418	6/9/2005	B8	<i>Lutjanus campechanus</i>	458	1	Stopped at 20 min; boat within 1 mile
419	6/9/2005	C21	<i>Lutjanus campechanus</i>	365	1	
420	6/9/2005	C21	<i>Balistes capriscus</i>	325	2	
421	6/9/2005	C21	<i>Pagrus pagrus</i>	335	1	
422	6/9/2005	C21	<i>Mycteroperca microlepis</i>	500	1	Sow rig
423	6/9/2005	C21	<i>Mycteroperca microlepis</i>		1	SE; No Length Recorded

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
424	6/9/2005	C21	<i>Balistes capriscus</i>	305	1	
425	6/9/2005	C21	<i>Mycteroperca microlepis</i>	462	1	
426	6/9/2005	C21	<i>Lutjanus campechanus</i>	372	1	BO
427	6/9/2005	C21	<i>Mycteroperca microlepis</i>	468	1	foul hook (nape)
428	6/9/2005	C21	<i>Lutjanus campechanus</i>	385	1	Sow rig, foul hook (stomach), BO
429	6/9/2005	C21	<i>Lutjanus campechanus</i>	323	1	
430	6/9/2005	C21	<i>Mycteroperca microlepis</i>	572	1	
431	6/9/2005	C21	<i>Balistes capriscus</i>	575	1	
432	6/9/2005	C21	<i>Lutjanus campechanus</i>	303	2	
433	6/9/2005	C21	<i>Lutjanus campechanus</i>	330	1	
434	6/9/2005	C21	<i>Mycteroperca microlepis</i>	437	3	
435	6/9/2005	C21	<i>Lutjanus campechanus</i>	326	4	
436	6/9/2005	C21	<i>Lutjanus campechanus</i>	287	1	SE
437	6/9/2005	C21	<i>Rhomboplites aurorubens</i>	422	2	Sow rig, foul hook
438	6/9/2005	C21	<i>Pagrus pagrus</i>	366	1	
439	6/9/2005	C21	<i>Balistes capriscus</i>	330	1	
440	6/9/2005	C21	<i>Lutjanus campechanus</i>	340	1	
441	6/9/2005	C21	<i>Lutjanus campechanus</i>	380	1	Sow rig, foul hook
442	6/9/2005	C21	<i>Mycteroperca microlepis</i>	483	3	missing half of tail
443	6/9/2005	C21	<i>Balistes capriscus</i>	325	1	
444	6/9/2005	C21	<i>Lutjanus campechanus</i>	316	1	
445	6/9/2005	C21	<i>Lutjanus campechanus</i>	362	1	Sow rig
446	6/9/2005	C21	<i>Lutjanus campechanus</i>	328	1	
447	6/9/2005	C21	<i>Lutjanus campechanus</i>	360	4	
448	6/9/2005	C21	<i>Lutjanus campechanus</i>	326	1	BO
449	6/9/2005	C21	<i>Lutjanus campechanus</i>	358	1	
450	6/9/2005	C21	<i>Lutjanus campechanus</i>	310	1	
451	6/9/2005	C21	<i>Lutjanus campechanus</i>	345	2	
452	6/9/2005	C21	<i>Lutjanus campechanus</i>	312	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
453	6/9/2005	C21	<i>Lutjanus campechanus</i>	316	1	SE
454	6/9/2005	C21	<i>Lutjanus campechanus</i>	326	1	
455	6/9/2005	C21	<i>Lutjanus campechanus</i>	380	1	SE
456	6/9/2005	C21	<i>Pagrus pagrus</i>	348	1	
457	6/9/2005	C21	<i>Lutjanus campechanus</i>	300	1	
458	6/9/2005	C21	<i>Lutjanus campechanus</i>	317	2	
459	6/9/2005	C21	<i>Lutjanus campechanus</i>	327	1	
460	6/9/2005	C21	<i>Lutjanus campechanus</i>	404	1	Sow rig
461	6/9/2005	C21	<i>Mycteroperca microlepis</i>	480	1	
462	6/9/2005	C21	<i>Lutjanus campechanus</i>	375	1	
463	6/9/2005	C21	<i>Mycteroperca microlepis</i>	528	1	
464	6/9/2005	C21	<i>Lutjanus campechanus</i>	338	1	Sow rig
465	6/9/2005	C21	<i>Lutjanus campechanus</i>	331	1	
466	6/9/2005	C21	<i>Lutjanus campechanus</i>	334	3	
467	6/9/2005	C21	<i>Lutjanus campechanus</i>	335	1	
468	6/9/2005	C21	<i>Lutjanus campechanus</i>	307	4	
469	6/9/2005	C21	<i>Balistes capriscus</i>	300	1	
470	6/9/2005	C21	<i>Lutjanus campechanus</i>	315	1	
471	6/9/2005	C21	<i>Pagrus pagrus</i>	305	1	
472	6/9/2005	C21	<i>Lutjanus campechanus</i>	307	1	
473	6/9/2005	C21	<i>Lutjanus campechanus</i>	320	1	
474	6/9/2005	C21	<i>Mycteroperca microlepis</i>	547	3	Sow rig, BE
475	6/9/2005	C21	<i>Lutjanus campechanus</i>	312	1	
476	6/9/2005	C21	<i>Pagrus pagrus</i>	318	1	
477	6/9/2005	C21	<i>Lutjanus campechanus</i>	310	2	bleeding from gills
478	6/9/2005	C21	<i>Lutjanus campechanus</i>	306	1	BO
479	6/9/2005	C21	<i>Lutjanus campechanus</i>	300	1	
480	6/9/2005	C15	<i>Lutjanus campechanus</i>	397	1	
481	6/9/2005	C15	<i>Balistes capriscus</i>	314	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
482	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	342	1	
483	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	366	1	
484	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	373	1	
485	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	331	1	
486	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	322	1	
487	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	355	1	Foul hook
488	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	334	1	
489	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	353	3	
490	6/9/2005	C15	<i>Mycteroperca microlepis</i>	353	1	
491	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	350	2	
492	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	372	1	
493	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	361	1	
494	6/9/2005	C15	<i>Lutjanus campechanus</i>	460	1	
495	6/9/2005	C15	<i>Rhomboplites aurorubens</i>	357	1	
496	6/9/2005	B2	<i>Lutjanus campechanus</i>	455	1	Sow rig, boats about 1 mile away
497	6/9/2005	B2	<i>Lutjanus campechanus</i>	418	1	BO
498	6/9/2005	B2	<i>Lutjanus campechanus</i>	458	1	
499	6/9/2005	B2	<i>Lutjanus campechanus</i>	447	1	
500	6/9/2005	B2	<i>Lutjanus campechanus</i>	404	1	
501	6/9/2005	B2	<i>Lutjanus campechanus</i>	420	2	
502	6/9/2005	B2	<i>Balistes capriscus</i>	340	1	
503	6/9/2005	B2	<i>Lutjanus campechanus</i>	418	1	
504	6/9/2005	B2	<i>Balistes capriscus</i>	302	1	
505	6/9/2005	B2	<i>Lutjanus campechanus</i>	462	1	
506	6/9/2005	B2	<i>Balistes capriscus</i>	322	1	
507	6/9/2005	B2	<i>Lutjanus campechanus</i>	452	1	
508	6/9/2005	B2	<i>Lutjanus campechanus</i>	510	2	
509	6/9/2005	B2	<i>Lutjanus campechanus</i>	424	1	
510	6/9/2005	B2	<i>Lutjanus campechanus</i>	422	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
511	6/9/2005	B2	<i>Lutjanus campechanus</i>	461	1	
512	6/9/2005	B2	<i>Lutjanus campechanus</i>	432	1	
513	6/9/2005	B2	<i>Lutjanus campechanus</i>	454	1	Sow rig, swallowed hook
514	6/9/2005	B2	<i>Lutjanus campechanus</i>	371	1	
515	6/9/2005	B2	<i>Lutjanus campechanus</i>	396	1	
516	6/9/2005	B2	<i>Lutjanus campechanus</i>	515	1	Sow rig
517	6/9/2005	B2	<i>Lutjanus campechanus</i>	418	1	
518	6/9/2005	B2	<i>Lutjanus campechanus</i>	517	1	
519	6/9/2005	B2	<i>Lutjanus campechanus</i>	346	1	
520	6/9/2005	B2	<i>Lutjanus campechanus</i>	327	1	
521	6/9/2005	B2	<i>Lutjanus campechanus</i>	450	1	Sow rig
522	6/9/2005	B2	<i>Lutjanus campechanus</i>	440	1	
523	6/9/2005	B2	<i>Lutjanus campechanus</i>	372	1	Swallowed hook
524	6/9/2005	B2	<i>Lutjanus campechanus</i>	478	1	
525	6/9/2005	B2	<i>Lutjanus campechanus</i>	512	1	Sow rig
526	6/9/2005	B2	<i>Lutjanus campechanus</i>	430	1	
527	6/9/2005	B2	<i>Lutjanus campechanus</i>	474	1	
528	6/9/2005	B2	<i>Lutjanus campechanus</i>	451	1	Sow rig
529	6/9/2005	B2	<i>Lutjanus campechanus</i>	454	1	Swallowed hook
530	6/9/2005	B2	<i>Lutjanus campechanus</i>	481	1	
531	6/9/2005	B9	<i>Lutjanus campechanus</i>	444	1	
532	6/9/2005	B9	<i>Lutjanus campechanus</i>	376	3	
533	6/9/2005	B9	<i>Pagrus pagrus</i>	315	1	
534	6/9/2005	B9	<i>Mycteroperca microlepis</i>	534	1	
535	6/9/2005	B9	<i>Lutjanus campechanus</i>	376	3	
536	6/9/2005	B9	<i>Lutjanus campechanus</i>	402	1	
537	6/9/2005	B9	<i>Pagrus pagrus</i>	326	1	Dolphins present
538	6/9/2005	B9	<i>Balistes capriscus</i>	331	1	BO
539	6/9/2005	B9	<i>Balistes capriscus</i>	378	1	BO

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
540	6/9/2005	B9	<i>Lutjanus campechanus</i>	396	3	
541	6/9/2005	B9	<i>Lutjanus campechanus</i>	364	4	
542	6/9/2005	B9	<i>Lutjanus campechanus</i>	410	1	
543	6/9/2005	B9	<i>Lutjanus campechanus</i>	385	1	
544	6/9/2005	B9	<i>Lutjanus campechanus</i>	403	1	BO
545	6/9/2005	B9	<i>Lutjanus campechanus</i>	411	1	Sow rig
546	6/9/2005	B9	<i>Lutjanus campechanus</i>	426	1	
547	6/9/2005	B9	<i>Lutjanus campechanus</i>	400	1	
548	6/9/2005	B9	<i>Lutjanus campechanus</i>	367	1	
549	6/9/2005	B9	<i>Lutjanus campechanus</i>	330	1	
550	6/9/2005	B9	<i>Lutjanus campechanus</i>	397	1	SE
551	6/9/2005	B9	<i>Lutjanus campechanus</i>	357	3	
552	6/9/2005	B9	<i>Lutjanus campechanus</i>	352	3	
553	6/9/2005	B9	<i>Lutjanus campechanus</i>	396	3	
554	6/9/2005	B9	<i>Lutjanus campechanus</i>	395	1	
555	6/9/2005	B9	<i>Lutjanus campechanus</i>	395	1	
556	6/9/2005	B9	<i>Lutjanus campechanus</i>	382	1	
557	6/9/2005	B9	<i>Mycteroperca microlepis</i>	532	1	Sow rig
558	6/9/2005	B9	<i>Pagrus pagrus</i>	322	2	
559	6/9/2005	B9	<i>Lutjanus campechanus</i>	374	1	
560	6/9/2005	B9	<i>Lutjanus campechanus</i>	418	1	
561	6/9/2005	B9	<i>Mycteroperca microlepis</i>	560	1	
562	6/9/2005	B9	<i>Lutjanus campechanus</i>	396	1	
563	6/9/2005	B9	<i>Mycteroperca microlepis</i>	448	1	Sow rig
564	6/9/2005	A20	<i>Rhomboplites aurorubens</i>	293	1	Lost right eye
565	6/9/2005	A20	<i>Pagrus pagrus</i>	345	1	
566	6/9/2005	A20	<i>Lutjanus campechanus</i>	423	1	
567	6/9/2005	A20	<i>Mycteroperca microlepis</i>	477	1	SE, swallowed hook
568	6/9/2005	A20	<i>Mycteroperca microlepis</i>	504	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
569	6/9/2005	A20	<i>Mycteroperca microlepis</i>	566	1	SE
570	6/9/2005	A20	<i>Mycteroperca microlepis</i>	538	1	SE
571	6/9/2005	A20	<i>Pagrus pagrus</i>	309	1	
572	6/9/2005	A20	<i>Rhomboplites aurorubens</i>	317	1	
573	6/9/2005	A20	<i>Mycteroperca microlepis</i>	506	1	
574	6/9/2005	A20	<i>Mycteroperca microlepis</i>	467	1	
575	6/9/2005	A20	<i>Balistes capriscus</i>	269	1	
576	6/9/2005	A20	<i>Mycteroperca microlepis</i>	505	1	SE
577	6/9/2005	A20	<i>Mycteroperca microlepis</i>	485	1	Sow rig, SE
578	6/9/2005	A20	<i>Mycteroperca phenax</i>	408	1	
579	6/9/2005	A19	<i>Pagrus pagrus</i>	316	1	
580	6/9/2005	A19	<i>Mycteroperca phenax</i>	362	1	dolphins present
581	6/9/2005	A19	<i>Lutjanus campechanus</i>	334	2	
582	6/9/2005	A19	<i>Balistes capriscus</i>	304	1	
583	6/9/2005	A19	<i>Lutjanus campechanus</i>	324	2	SE
584	6/9/2005	A19	<i>Lutjanus campechanus</i>	326	1	SE
585	6/9/2005	A19	<i>Lutjanus campechanus</i>	328	3	
586	6/9/2005	A19	<i>Lutjanus campechanus</i>	338	3	
587	6/9/2005	A19	<i>Lutjanus campechanus</i>	337	1	BO
588	6/9/2005	A19	<i>Lutjanus campechanus</i>	296	1	BO
589	6/9/2005	A19	<i>Lutjanus campechanus</i>	292	1	BO
590	6/9/2005	A19	<i>Lutjanus campechanus</i>	317	2	
591	6/9/2005	A19	<i>Lutjanus campechanus</i>	310	1	SE
592	6/9/2005	A19	<i>Lutjanus campechanus</i>	301	1	SE
593	6/9/2005	A19	<i>Lutjanus campechanus</i>	300	2	
594	6/9/2005	A19	<i>Lutjanus campechanus</i>	305	1	BO, more dolphins
595	6/9/2005	A19	<i>Lutjanus campechanus</i>	312	1	BO
596	6/9/2005	A19	<i>Lutjanus campechanus</i>	301	1	
597	6/9/2005	A19	<i>Lutjanus campechanus</i>	326	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
598	6/9/2005	A19	<i>Lutjanus campechanus</i>	306	2	BO
599	6/9/2005	A19	<i>Lutjanus campechanus</i>	312	1	
600	6/9/2005	A19	<i>Lutjanus campechanus</i>	288	1	
601	6/9/2005	A19	<i>Lutjanus campechanus</i>	296	1	Sow rig, BO
602	6/9/2005	A19	<i>Lutjanus campechanus</i>	313	2	
603	6/9/2005	A19	<i>Epinephelus morio</i>	508	1	SE
604	6/9/2005	A19	<i>Lutjanus campechanus</i>	344	1	BO
605	6/9/2005	A19	<i>Lutjanus campechanus</i>	350	1	
606	6/9/2005	A19	<i>Pagrus pagrus</i>	315	2	
607	6/9/2005	A12	<i>Mycteroperca microlepis</i>	437	1	
608	6/9/2005	A12	<i>Lutjanus campechanus</i>	406	3	
609	6/9/2005	A12	<i>Pagrus pagrus</i>	362	1	
610	6/9/2005	A12	<i>Lutjanus campechanus</i>	397	1	
611	6/9/2005	A12	<i>Lutjanus campechanus</i>	617	1	Sow rig
612	6/9/2005	A12	<i>Lutjanus campechanus</i>	372	1	
613	6/9/2005	A12	<i>Lutjanus campechanus</i>	422	1	
614	6/9/2005	A12	<i>Lutjanus campechanus</i>	370	1	Boat too close; left 14:14 to 14:20
615	6/9/2005	A12	<i>Mycteroperca microlepis</i>	488	1	
616	6/9/2005	A12	<i>Lutjanus campechanus</i>	391	1	
617	6/9/2005	A12	<i>Lutjanus campechanus</i>	379	1	
618	6/9/2005	A12	<i>Lutjanus campechanus</i>	434	1	Boat too close; left 14:27 to 14:31
619	6/9/2005	A12	<i>Lutjanus campechanus</i>	414	1	
620	6/9/2005	A12	<i>Mycteroperca microlepis</i>	435	1	
621	9/27/2005	A12	<i>Lutjanus campechanus</i>	317	1	Dolphin on site before first drop
622	9/27/2005	A12	<i>Lutjanus campechanus</i>	345	1	
623	9/27/2005	A12	<i>Lutjanus campechanus</i>	323	3	
624	9/27/2005	A12	<i>Lutjanus campechanus</i>	330	2	Eaten by dolphin
625	9/27/2005	A12	<i>Lutjanus campechanus</i>	328	1	
626	9/27/2005	A12	<i>Lutjanus campechanus</i>	334	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
627	9/27/2005	A12	<i>Lutjanus campechanus</i>	327	1	
628	9/27/2005	A12	<i>Lutjanus campechanus</i>	380	1	
629	9/27/2005	A12	<i>Lutjanus campechanus</i>	404	1	
630	9/27/2005	A12	<i>Lutjanus campechanus</i>	338	1	
631	9/27/2005	A12	<i>Lutjanus campechanus</i>	310	3	Eaten by dolphin
632	9/27/2005	A12	<i>Lutjanus campechanus</i>	397	1	
633	9/27/2005	A12	<i>Lutjanus campechanus</i>	374	1	
634	9/27/2005	A12	<i>Lutjanus campechanus</i>	330	1	Eaten by dolphin
635	9/27/2005	A12	<i>Lutjanus campechanus</i>	327	1	
636	9/27/2005	A12	<i>Lutjanus campechanus</i>	348	1	
637	9/27/2005	A12	<i>Lutjanus campechanus</i>	314	1	
638	9/27/2005	A12	<i>Lutjanus campechanus</i>	427	1	
639	9/27/2005	A12	<i>Lutjanus campechanus</i>	372	1	
640	9/27/2005	A12	<i>Lutjanus campechanus</i>	311	4	Eaten by dolphin
641	9/27/2005	A12	<i>Lutjanus campechanus</i>	257	1	BO
642	9/27/2005	A12	<i>Lutjanus campechanus</i>	273	1	
643	9/27/2005	A12	<i>Lutjanus campechanus</i>	322	1	
644	9/27/2005	A12	<i>Lutjanus campechanus</i>	322	3	
645	9/27/2005	A12	<i>Lutjanus campechanus</i>	337	1	
646	9/27/2005	A12	<i>Lutjanus campechanus</i>	380	1	SE
647	9/27/2005	A12	<i>Lutjanus campechanus</i>	366	1	
648	9/27/2005	A12	<i>Lutjanus campechanus</i>	328	1	
649	9/27/2005	A12	<i>Lutjanus campechanus</i>	385	1	
650	9/27/2005	A12	<i>Lutjanus campechanus</i>	302	1	
651	9/27/2005	A12	<i>Lutjanus campechanus</i>	351	2	Sow rig
652	9/27/2005	A12	<i>Lutjanus campechanus</i>	331	1	
653	9/27/2005	A12	<i>Lutjanus campechanus</i>	358	3	
654	9/27/2005	A12	<i>Lutjanus campechanus</i>	332	1	
655	9/27/2005	A12	<i>Balistes caprisus</i>	402	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
656	9/27/2005	B8	<i>Lutjanus campechanus</i>	435	1	
657	9/27/2005	B8	<i>Lutjanus campechanus</i>	525	1	
658	9/27/2005	B8	<i>Lutjanus campechanus</i>	416	1	
659	9/27/2005	B8	<i>Lutjanus campechanus</i>	411	1	
660	9/27/2005	B8	<i>Lutjanus campechanus</i>	464	1	Sow rig
661	9/27/2005	B8	<i>Lutjanus campechanus</i>	340	1	Bleeding from gills
662	9/27/2005	B8	<i>Lutjanus campechanus</i>	593	4	Eaten by dolphin, sow rig
663	9/27/2005	B8	<i>Lutjanus campechanus</i>	454	3	Bleeding from gills, eaten by dolphin
664	9/27/2005	B8	<i>Balistes caprisus</i>	395	1	
665	9/27/2005	B8	<i>Lutjanus campechanus</i>	425	1	Sow rig
666	9/27/2005	B8	<i>Lutjanus campechanus</i>	370	2	
667	9/27/2005	B8	<i>Lutjanus campechanus</i>	331	1	
668	9/27/2005	B8	<i>Lutjanus campechanus</i>	555	1	Sow rig
669	9/27/2005	B8	<i>Lutjanus campechanus</i>	420	2	
670	9/27/2005	B8	<i>Lutjanus campechanus</i>	541	1	
671	9/27/2005	B8	<i>Lutjanus campechanus</i>	352	3	
672	9/27/2005	B8	<i>Lutjanus campechanus</i>	344	1	
673	9/27/2005	B8	<i>Lutjanus campechanus</i>	400	1	Eaten by dolphin, sow rig
674	9/27/2005	B8	<i>Lutjanus campechanus</i>	330	1	
675	9/27/2005	B8	<i>Lutjanus campechanus</i>	391	1	
676	9/27/2005	B8	<i>Lutjanus campechanus</i>	394	1	
677	9/27/2005	B8	<i>Lutjanus campechanus</i>	400	1	SE, sow rig
678	9/27/2005	B8	<i>Lutjanus campechanus</i>	354	1	
679	9/27/2005	B8	<i>Lutjanus campechanus</i>	305	1	
680	9/27/2005	B8	<i>Lutjanus campechanus</i>	402	2	
681	9/27/2005	B8	<i>Lutjanus campechanus</i>	612	1	
682	9/27/2005	B8	<i>Lutjanus campechanus</i>	322	2	Sow rig, foul hooked
683	9/27/2005	B8	<i>Lutjanus campechanus</i>	325	1	
684	9/27/2005	B8	<i>Lutjanus campechanus</i>	388	1	Sow rig

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
685	9/27/2005	B8	<i>Lutjanus campechanus</i>	381	3	
686	9/27/2005	B8	<i>Lutjanus campechanus</i>	284	4	
687	9/27/2005	B8	<i>Lutjanus campechanus</i>	410	2	Eaten by dolphin
688	9/27/2005	C32	<i>Lutjanus campechanus</i>	390	1	
689	9/27/2005	C32	<i>Lutjanus campechanus</i>	389	1	
690	9/27/2005	C32	<i>Lutjanus campechanus</i>	354	2	Sow rig
691	9/27/2005	C32	<i>Lutjanus campechanus</i>	356	1	
692	9/27/2005	C32	<i>Lutjanus campechanus</i>	317	1	
693	9/27/2005	C32	<i>Lutjanus campechanus</i>	342	4	
694	9/27/2005	C32	<i>Lutjanus campechanus</i>	304	1	SE
695	9/27/2005	C32	<i>Lutjanus campechanus</i>	325	1	
696	9/27/2005	C32	<i>Lutjanus campechanus</i>	289	1	
697	9/27/2005	C32	<i>Lutjanus campechanus</i>	285	1	Sow rig
698	9/27/2005	C32	<i>Lutjanus campechanus</i>	295	1	
699	9/27/2005	C32	<i>Lutjanus campechanus</i>	299	2	
700	9/27/2005	C32	<i>Lutjanus campechanus</i>	284	1	
701	9/27/2005	C32	<i>Lutjanus campechanus</i>	317	1	
702	9/27/2005	C32	<i>Lutjanus campechanus</i>	284	1	
703	9/27/2005	C32	<i>Lutjanus campechanus</i>	300	1	
704	9/27/2005	C21	<i>Lutjanus campechanus</i>	412	1	
705	9/27/2005	C21	<i>Lutjanus campechanus</i>	400	3	
706	9/27/2005	C21	<i>Lutjanus campechanus</i>	326	1	
707	9/27/2005	C21	<i>Lutjanus campechanus</i>	393	1	
708	9/27/2005	C21	<i>Lutjanus campechanus</i>	346	1	
709	9/27/2005	C21	<i>Lutjanus campechanus</i>	331	1	
710	9/27/2005	C21	<i>Lutjanus campechanus</i>	310	1	
711	9/27/2005	C21	<i>Lutjanus campechanus</i>	319	1	SE
712	9/27/2005	C21	<i>Lutjanus campechanus</i>	340	2	
713	9/27/2005	C21	<i>Lutjanus campechanus</i>	320	2	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
714	9/27/2005	C21	<i>Lutjanus campechanus</i>	285	2	
715	9/27/2005	C21	<i>Lutjanus campechanus</i>	264	2	SE, eaten by dolphin
716	9/27/2005	C21	<i>Lutjanus campechanus</i>	340	1	
717	9/27/2005	C21	<i>Lutjanus campechanus</i>	335	3	Eaten by dolphin
718	9/27/2005	C21	<i>Lutjanus campechanus</i>	318	4	Eaten by dolphin
719	9/27/2005	C21	<i>Lutjanus campechanus</i>	312	1	SE
720	9/27/2005	C21	<i>Lutjanus campechanus</i>	317	1	
721	9/27/2005	C21	<i>Lutjanus campechanus</i>	370	1	SE
722	9/27/2005	C21	<i>Lutjanus campechanus</i>	373	3	
723	9/27/2005	C21	<i>Lutjanus campechanus</i>	391	2	BO, sow rig
724	9/27/2005	C21	<i>Lutjanus campechanus</i>	335	1	
725	9/27/2005	C21	<i>Lutjanus campechanus</i>	302	3	
726	9/27/2005	C21	<i>Lutjanus campechanus</i>	344	4	Eaten by dolphin
727	9/27/2005	C21	<i>Lutjanus campechanus</i>	316	4	Eaten by dolphin
728	9/27/2005	C21	<i>Lutjanus campechanus</i>	343	3	
729	9/27/2005	C21	<i>Lutjanus campechanus</i>	369	2	
730	9/27/2005	C21	<i>Balistes caprisus</i>	276	1	
731	9/27/2005	C21	<i>Lutjanus campechanus</i>	362	2	BO, sow rig
732	9/27/2005	C21	<i>Lutjanus campechanus</i>	457	1	
733	9/27/2005	C21	<i>Lutjanus campechanus</i>	322	4	
734	9/27/2005	C21	<i>Lutjanus campechanus</i>	309	1	SE
735	9/27/2005	C21	<i>Lutjanus campechanus</i>	258	1	SE
736	9/27/2005	C21	<i>Lutjanus campechanus</i>	390	3	Eaten by dolphin
737	9/27/2005	C21	<i>Lutjanus campechanus</i>	304	1	SE
738	9/27/2005	C21	<i>Lutjanus campechanus</i>	388	1	Sow rig
739	9/27/2005	C21	<i>Lutjanus campechanus</i>	303	1	
740	9/27/2005	C21	<i>Lutjanus campechanus</i>	341	4	
741	9/27/2005	C21	<i>Lutjanus campechanus</i>	305	3	
742	9/27/2005	C21	<i>Lutjanus campechanus</i>	317	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
743	9/27/2005	C21	<i>Lutjanus campechanus</i>	265	1	
744	9/27/2005	C21	<i>Pagrus pagrus</i>	298	1	
745	9/27/2005	C21	<i>Lutjanus campechanus</i>	335	4	Swallowed hook
746	9/27/2005	C21	<i>Lutjanus campechanus</i>	326	1	Swallowed hook
747	9/27/2005	C21	<i>Lutjanus campechanus</i>	333	1	
748	9/27/2005	C21	<i>Lutjanus campechanus</i>	264	1	SE
749	9/27/2005	C21	<i>Lutjanus campechanus</i>	320	4	
750	9/27/2005	C21	<i>Lutjanus campechanus</i>	310	1	
751	9/27/2005	C21	<i>Lutjanus campechanus</i>	344	1	
752	9/27/2005	C21	<i>Lutjanus campechanus</i>	306	2	
753	9/27/2005	C21	<i>Lutjanus campechanus</i>	376	1	
754	9/27/2005	C21	<i>Lutjanus campechanus</i>	352	1	SE
755	9/27/2005	C21	<i>Lutjanus campechanus</i>	328	1	
756	9/27/2005	C21	<i>Lutjanus campechanus</i>	304	2	
757	9/27/2005	C21	<i>Lutjanus campechanus</i>	392	1	Foul hooked, sow rig
758	9/27/2005	C21	<i>Lutjanus campechanus</i>	285	1	
759	9/27/2005	B9	<i>Mycteroperca microlepis</i>	520	1	SE, swallowed hook, eaten by dolphin
760	9/27/2005	B9	<i>Lutjanus campechanus</i>	327	1	
761	9/27/2005	B9	<i>Lutjanus campechanus</i>	347	1	
762	9/27/2005	B9	<i>Lutjanus campechanus</i>	460	1	Sow rig
763	9/27/2005	B9	<i>Lutjanus campechanus</i>	328	1	
764	9/27/2005	B9	<i>Lutjanus campechanus</i>	270	1	
765	9/27/2005	B9	<i>Seriola fasciata</i>	395	1	
766	9/27/2005	B9	<i>Lutjanus campechanus</i>	485	1	SE, Eaten by dolphin
767	9/27/2005	B9	<i>Lutjanus campechanus</i>	359	1	
768	9/27/2005	B9	<i>Lutjanus campechanus</i>	340	4	Swallowed hook
769	9/27/2005	B9	<i>Lutjanus campechanus</i>	448	3	
770	9/27/2005	B9	<i>Seriola fasciata</i>	365	1	
771	9/27/2005	B9	<i>Lutjanus campechanus</i>	308	1	SE

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
772	9/27/2005	B9	<i>Lutjanus campechanus</i>	357	1	
773	9/27/2005	B9	<i>Lutjanus campechanus</i>	336	2	
774	9/27/2005	B9	<i>Lutjanus campechanus</i>	348	1	
775	9/27/2005	B9	<i>Lutjanus campechanus</i>	378	1	Sow rig
776	9/27/2005	B9	<i>Lutjanus campechanus</i>	360	1	BO
777	9/27/2005	B9	<i>Seriola fasciata</i>	357	1	
778	9/27/2005	B9	<i>Lutjanus campechanus</i>	314	1	
779	9/27/2005	B9	<i>Lutjanus campechanus</i>	362	1	
780	9/27/2005	B9	<i>Lutjanus campechanus</i>	374	2	Eaten by dolphin
781	9/27/2005	B9	<i>Lutjanus campechanus</i>	344	1	
782	9/27/2005	B9	<i>Lutjanus campechanus</i>	286	1	
783	9/27/2005	B9	<i>Lutjanus campechanus</i>	340	2	Foul hooked
784	9/27/2005	B9	<i>Lutjanus campechanus</i>	389	1	
785	9/27/2005	B9	<i>Lutjanus campechanus</i>	356	1	
786	9/27/2005	B9	<i>Lutjanus campechanus</i>	342	1	
787	9/27/2005	B9	<i>Lutjanus campechanus</i>	397	1	SE
788	9/27/2005	B9	<i>Lutjanus campechanus</i>	356	1	SE
789	9/27/2005	B9	<i>Balistes caprisus</i>	434	4	Swallowed hook, hook left in
790	9/27/2005	C15	<i>Lutjanus campechanus</i>	405	1	Swallowed hook
791	9/27/2005	C15	<i>Lutjanus campechanus</i>	278	4	
792	9/27/2005	C15	<i>Rhomboplites aurorubens</i>	368	3	Swallowed hook
793	9/27/2005	C15	<i>Lutjanus campechanus</i>	310	1	
794	9/27/2005	C15	<i>Lutjanus campechanus</i>	341	1	
795	9/27/2005	C15	<i>Balistes caprisus</i>	325	1	
796	9/27/2005	C15	<i>Lutjanus campechanus</i>	355	1	
797	9/27/2005	C15	<i>Lutjanus campechanus</i>	384	1	Sow rig
798	9/27/2005	C15	<i>Lutjanus campechanus</i>	306	1	
799	9/27/2005	C15	<i>Lutjanus campechanus</i>	326	1	
800	9/27/2005	C15	<i>Mycteroperca microlepis</i>	459	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
801	9/27/2005	C15	<i>Lutjanus campechanus</i>	308	1	SE
802	9/27/2005	C15	<i>Lutjanus campechanus</i>	310	1	
803	9/27/2005	C15	<i>Lutjanus campechanus</i>	344	3	Sow rig
804	9/27/2005	C15	<i>Lutjanus campechanus</i>	295	2	
805	9/27/2005	C15	<i>Lutjanus campechanus</i>	336	1	SE
806	9/27/2005	C15	<i>Lutjanus campechanus</i>	277	1	SE
807	9/27/2005	C15	<i>Lutjanus campechanus</i>	352	3	
808	9/27/2005	C15	<i>Lutjanus campechanus</i>	324	3	
809	9/27/2005	C15	<i>Lutjanus campechanus</i>	315	1	
810	9/27/2005	C15	<i>Rhomboplites aurorubens</i>	338	1	
811	9/27/2005	C15	<i>Balistes capriscus</i>	307	1	
812	9/27/2005	C15	<i>Lutjanus campechanus</i>	378	1	
813	9/27/2005	C15	<i>Lutjanus campechanus</i>	287	2	
814	9/27/2005	C15	<i>Lutjanus campechanus</i>	279	1	
815	9/27/2005	C15	<i>Lutjanus campechanus</i>	345	1	
816	9/27/2005	C15	<i>Lutjanus campechanus</i>	438	1	
817	9/27/2005	C15	<i>Balistes capriscus</i>	291	1	BO
818	9/27/2005	A19	<i>Lutjanus campechanus</i>	365	1	Swallowed hook
819	9/27/2005	A19	<i>Lutjanus campechanus</i>	321	1	SE
820	9/27/2005	A19	<i>Lutjanus campechanus</i>	265	1	
821	9/27/2005	A19	<i>Lutjanus campechanus</i>	301	2	SE
822	9/27/2005	A19	<i>Lutjanus campechanus</i>	292	2	
823	9/27/2005	A19	<i>Lutjanus campechanus</i>	277	4	
824	9/27/2005	A19	<i>Lutjanus campechanus</i>	316	4	
825	9/27/2005	A19	<i>Lutjanus campechanus</i>	316	1	
826	9/27/2005	A19	<i>Rhomboplites aurorubens</i>	296	1	
827	9/27/2005	A19	<i>Lutjanus campechanus</i>	265	1	
828	9/27/2005	A19	<i>Lutjanus campechanus</i>	262	1	
829	9/27/2005	A19	<i>Lutjanus campechanus</i>	322	1	SE

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
830	9/27/2005	A19	<i>Lutjanus campechanus</i>	257	3	Foul hooked, sow rig
831	9/27/2005	A19	<i>Lutjanus campechanus</i>	315	3	
832	9/27/2005	A19	<i>Lutjanus campechanus</i>	284	1	BO
833	9/27/2005	A19	<i>Rhomboplites aurorubens</i>	285	1	
834	9/27/2005	A19	<i>Lutjanus campechanus</i>	246	4	
835	9/27/2005	A19	<i>Lutjanus campechanus</i>	327	1	Sow rig, SE
836	9/27/2005	A19	<i>Lutjanus campechanus</i>	358	3	Swallowed hook
837	9/27/2005	A19	<i>Lutjanus campechanus</i>	287	1	
838	9/27/2005	A19	<i>Lutjanus campechanus</i>	320	1	SE
839	9/27/2005	A19	<i>Rhomboplites aurorubens</i>	304	1	
840	9/27/2005	A19	<i>Lutjanus campechanus</i>	301	1	
841	9/27/2005	A19	<i>Lutjanus campechanus</i>	379	2	Sow rig
842	9/27/2005	A19	<i>Balistes capriscus</i>	300	1	
843	9/27/2005	A19	<i>Lutjanus campechanus</i>	382	1	
844	9/27/2005	A19	<i>Rhomboplites aurorubens</i>	276	2	
845	9/27/2005	A19	<i>Lutjanus synagris</i>	468	1	Sow Rig
846	9/27/2005	A19	<i>Rhomboplites aurorubens</i>	267	1	
847	9/27/2005	A19	<i>Lutjanus campechanus</i>	275	3	Swallowed hook
848	9/27/2005	A19	<i>Lutjanus campechanus</i>	358	1	
849	9/27/2005	A19	<i>Lutjanus campechanus</i>	320	2	Swallowed hook
850	9/27/2005	A19	<i>Lutjanus campechanus</i>	322	1	
851	9/27/2005	A19	<i>Lutjanus campechanus</i>	247	4	Swallowed hook
852	9/27/2005	A19	<i>Lutjanus campechanus</i>	345	1	
853	9/27/2005	A19	<i>Lutjanus synagris</i>	356	1	Sow rig
854	9/27/2005	A19	<i>Lutjanus campechanus</i>	290	1	
855	9/27/2005	A19	<i>Lutjanus campechanus</i>	343	1	SE
856	9/27/2005	A19	<i>Lutjanus campechanus</i>	334	2	
857	9/27/2005	A19	<i>Lutjanus campechanus</i>	375	1	
858	9/27/2005	A19	<i>Lutjanus campechanus</i>	294	4	Bleeding

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
859	9/27/2005	A19	<i>Lutjanus campechanus</i>	312	2	
860	9/27/2005	A19	<i>Lutjanus campechanus</i>	297	1	
861	9/27/2005	A19	<i>Lutjanus campechanus</i>	313	1	Sow rig
862	9/27/2005	A19	<i>Pagrus pagrus</i>	268	2	
863	9/27/2005	A19	<i>Lutjanus campechanus</i>	306	1	SE
864	9/27/2005	A19	<i>Lutjanus campechanus</i>	328	1	SE
865	9/27/2005	A19	<i>Lutjanus campechanus</i>	334	1	
866	9/27/2005	A19	<i>Lutjanus campechanus</i>	459	1	
867	9/27/2005	A19	<i>Lutjanus campechanus</i>	307	2	Swallowed hook
868	9/27/2005	A19	<i>Lutjanus campechanus</i>	312	1	SE
869	9/27/2005	A19	<i>Lutjanus campechanus</i>	278	1	
870	9/27/2005	A19	<i>Lutjanus campechanus</i>	303	1	
871	9/27/2005	A19	<i>Lutjanus campechanus</i>	262	2	Sow rig
872	9/27/2005	A19	<i>Lutjanus campechanus</i>	361	1	
873	9/27/2005	A19	<i>Lutjanus campechanus</i>	376	2	Sow rig, foul hooked
874	9/27/2005	A20	<i>Lutjanus campechanus</i>	310	1	
875	9/27/2005	A20	<i>Balistes capriscus</i>	311	1	
876	9/27/2005	A20	<i>Rhomboplites aurorubens</i>	342	1	
877	9/27/2005	A20	<i>Lutjanus campechanus</i>	294	1	SE
878	9/27/2005	A20	<i>Lutjanus campechanus</i>	338	2	BO
879	9/27/2005	A20	<i>Lutjanus campechanus</i>	335	2	Sow rig
880	9/27/2005	A20	<i>Lutjanus campechanus</i>	380	1	
881	9/27/2005	A20	<i>Lutjanus campechanus</i>	323	1	SE
882	9/27/2005	A20	<i>Lutjanus campechanus</i>	350	3	Swallowed hook
883	9/27/2005	A20	<i>Lutjanus campechanus</i>	330	4	
884	9/27/2005	A20	<i>Lutjanus campechanus</i>	318	1	SE
885	9/27/2005	A20	<i>Lutjanus campechanus</i>	335	2	
886	9/27/2005	A20	<i>Lutjanus campechanus</i>	399	1	
887	9/27/2005	A20	<i>Lutjanus campechanus</i>	368	1	Sow rig

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
888	9/27/2005	A20	<i>Lutjanus campechanus</i>	385	1	
889	9/27/2005	A20	<i>Lutjanus campechanus</i>	400	1	
890	9/27/2005	A20	<i>Lutjanus campechanus</i>	373	1	
891	9/27/2005	A20	<i>Rhomboplites aurorubens</i>	350	2	
892	9/27/2005	A20	<i>Lutjanus campechanus</i>	409	1	BO
893	9/27/2005	A20	<i>Lutjanus campechanus</i>	392	1	
894	9/27/2005	A20	<i>Lutjanus campechanus</i>	311	4	
895	9/27/2005	A20	<i>Lutjanus campechanus</i>	391	2	Sow rig
896	9/27/2005	A20	<i>Lutjanus campechanus</i>	331	1	
897	9/27/2005	A20	<i>Lutjanus campechanus</i>	323	1	Sow rig
898	9/27/2005	A20	<i>Lutjanus campechanus</i>	300	2	BO
899	9/27/2005	A20	<i>Lutjanus campechanus</i>	361	3	
900	9/27/2005	A20	<i>Lutjanus campechanus</i>	287	1	
901	9/27/2005	A20	<i>Lutjanus campechanus</i>	397	1	
902	9/27/2005	A20	<i>Lutjanus campechanus</i>	320	1	
903	9/27/2005	A20	<i>Lutjanus campechanus</i>	282	1	
904	9/27/2005	A20	<i>Rhomboplites aurorubens</i>	311	1	
905	9/27/2005	A20	<i>Lutjanus campechanus</i>	355	2	
906	9/27/2005	A20	<i>Lutjanus campechanus</i>	330	1	SE
907	9/27/2005	A20	<i>Lutjanus campechanus</i>	316	1	
908	9/27/2005	A20	<i>Lutjanus campechanus</i>	326	1	
909	9/27/2005	A20	<i>Lutjanus campechanus</i>	296	1	
910	9/27/2005	A20	<i>Balistes caprisus</i>	330	1	
911	9/27/2005	A20	<i>Lutjanus campechanus</i>	360	2	
912	9/27/2005	A20	<i>Lutjanus campechanus</i>	311	1	SE
913	9/27/2005	A20	<i>Lutjanus campechanus</i>	301	1	SE
914	9/27/2005	A20	<i>Mycteroperca microlepis</i>	506	1	
915	9/27/2005	A20	<i>Lutjanus campechanus</i>	350	1	
916	9/27/2005	A20	<i>Myceroperca phenax</i>	375	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
917	9/27/2005	A20	<i>Lutjanus campechanus</i>	395	2	BO, sow rig
918	9/27/2005	A20	<i>Mycteroperca microlepis</i>	515	1	Sow rig
919	9/27/2005	B2	<i>Lutjanus campechanus</i>	255	1	
920	9/27/2005	B2	<i>Lutjanus campechanus</i>	299	2	Swallowed hook
921	9/27/2005	B2	<i>Lutjanus campechanus</i>	260	1	SE
922	9/27/2005	B2	<i>Lutjanus campechanus</i>	415	1	
923	9/27/2005	B2	<i>Balistes capriscus</i>	310	1	
924	9/27/2005	B2	<i>Lutjanus campechanus</i>	400	1	Sow rig
925	9/27/2005	B2	<i>Lutjanus campechanus</i>	395	1	
926	9/27/2005	B2	<i>Lutjanus campechanus</i>	340	1	SE
927	9/27/2005	B2	<i>Lutjanus campechanus</i>	312	1	
928	9/27/2005	B2	<i>Lutjanus campechanus</i>	369	3	Swallowed hook
929	9/27/2005	B2	<i>Lutjanus campechanus</i>	403	4	Swallowed hook
930	9/27/2005	B2	<i>Lutjanus campechanus</i>	343	1	
931	9/27/2005	B2	<i>Lutjanus campechanus</i>	269	1	SE
932	9/27/2005	B2	<i>Lutjanus campechanus</i>	311	1	
933	9/27/2005	B2	<i>Lutjanus campechanus</i>	464	1	Sow rig
934	9/27/2005	B2	<i>Balistes capriscus</i>	300	1	
935	9/27/2005	B2	<i>Balistes capriscus</i>	286	1	
936	9/27/2005	B2	<i>Lutjanus campechanus</i>	415	2	
937	9/27/2005	B2	<i>Lutjanus campechanus</i>	281	1	
938	9/27/2005	B2	<i>Lutjanus campechanus</i>	287	1	Sow rig
939	9/27/2005	B2	<i>Lutjanus campechanus</i>	281	2	Sow rig
940	9/27/2005	B2	<i>Lutjanus campechanus</i>	262	1	
941	9/27/2005	B2	<i>Balistes capriscus</i>	295	1	
942	9/27/2005	B2	<i>Lutjanus campechanus</i>	286	1	
943	9/27/2005	B2	<i>Lutjanus campechanus</i>	299	1	
944	9/27/2005	B2	<i>Rhomboplites aurorubens</i>	304	1	Sow rig
945	9/27/2005	B2	<i>Rhomboplites aurorubens</i>	298	1	

Table 12. Tagging data continued.

Tag No.	Date	Site	Species	Length	Release Condition	Comments
946	9/27/2005	B2	<i>Lutjanus campechanus</i>	306	1	
947	9/27/2005	B2	<i>Lutjanus campechanus</i>	328	4	
948	9/27/2005	B2	<i>Lutjanus campechanus</i>	350	3	Swallowed hook
949	9/27/2005	B2	<i>Lutjanus campechanus</i>	345	3	
950	9/27/2005	B2	<i>Lutjanus campechanus</i>	439	1	Sow rig
951	9/27/2005	B2	<i>Lutjanus campechanus</i>	421	1	SE
952	9/27/2005	B2	<i>Lutjanus campechanus</i>	305	2	
953	9/27/2005	B2	<i>Lutjanus campechanus</i>	431	1	
954	9/27/2005	B2	<i>Lutjanus campechanus</i>	294	1	
955	9/27/2005	B2	<i>Lutjanus campechanus</i>	361	1	
956	9/27/2005	B2	<i>Lutjanus campechanus</i>	388	1	
957	9/27/2005	B2	<i>Lutjanus campechanus</i>	332	1	
958	9/27/2005	B2	<i>Lutjanus campechanus</i>	357	1	
959	9/27/2005	B2	<i>Lutjanus campechanus</i>	300	2	SE
960	9/27/2005	B2	<i>Lutjanus campechanus</i>	314	1	
961	9/27/2005	B2	<i>Lutjanus campechanus</i>	373	1	Sow rig
962	9/27/2005	B2	<i>Lutjanus campechanus</i>	360	1	
963	9/27/2005	B2	<i>Lutjanus campechanus</i>	374	1	
964	9/27/2005	B2	<i>Lutjanus campechanus</i>	394	1	
965	9/27/2005	B2	<i>Lutjanus campechanus</i>	313	1	
966	9/27/2005	B2	<i>Lutjanus campechanus</i>	457	1	
967	9/27/2005	B2	<i>Balistes caprisus</i>	374	3	BO
968	9/27/2005	B2	<i>Lutjanus campechanus</i>	309	1	
969	9/27/2005	B2	<i>Lutjanus campechanus</i>	320	1	
970	9/27/2005	B2	<i>Lutjanus campechanus</i>	361	1	
971	9/27/2005	B2	<i>Lutjanus campechanus</i>	251	1	SE
972	9/27/2005	B2	<i>Lutjanus campechanus</i>	346	1	
973	9/27/2005	B2	<i>Lutjanus campechanus</i>	306	1	

Table 13. Size and release condition data for fish caught over sampling reefs but not tagged. Lengths are total lengths in mm except fork length is reported for *Balistes caprisiscus*. Under comments, SE = distended esophagus due to swim bladder expansion , BO = intestine protruding from anus, and BE= eyes bulging from pressure effects.

Date	Site	Species	Length	Release Condition	Comments
3/26/2005	B2	<i>Echeneis naucrates</i>	725	N/A	
3/26/2005	C15	<i>Pagrus pagrus</i>	230	2	Too small to tag
3/26/2005	A20	<i>Pagrus pagrus</i>	255	1	Too small to tag
3/26/2005	A20	<i>Pagrus pagrus</i>	260	1	Too small to tag
3/26/2005	A20	<i>Pagrus pagrus</i>	284	1	Too small to tag
3/26/2005	A20	<i>Pagrus pagrus</i>	226	1	Too small to tag
3/26/2005	A20	<i>Pagrus pagrus</i>	249	1	Too small to tag
3/26/2005	A20	<i>Pagrus pagrus</i>	256	1	Too small to tag
3/26/2005	A20	<i>Pagrus pagrus</i>	294	1	Too small to tag
3/26/2005	B9	<i>Diplectrum bivittatum</i>	227	1	Too small to tag
3/26/2005	B9	<i>Pagrus pagrus</i>	204	1	Too small to tag
3/26/2005	C21	<i>Pagrus pagrus</i>	295	1	Too small to tag
3/26/2005	C2 1	<i>Lutjanus campechanus</i>			Accidentally released without tag
3/26/2005	C21	<i>Pagrus pagrus</i>	288	2	Too small to tag
3/26/2005	A34	<i>Pagrus pagrus</i>	272	1	Too small to tag
6/9/2005	C21	<i>Pagrus pagrus</i>	298	1	Too small to tag
6/9/2005	C21	<i>Pagrus pagrus</i>	282	1	Too small to tag
6/9/2005	C15	<i>Pagrus pagrus</i>	227	1	Too small to tag
6/9/2005	C15	<i>Pagrus pagrus</i>	251	1	Too small to tag
6/9/2005	C15	<i>Pagrus pagrus</i>	245	1	Too small to tag
6/9/2005	C15	<i>Pagrus pagrus</i>	238	1	Too small to tag
6/9/2005	B9	<i>Lutjanus campechanus</i>	395	1	Accidentally released without tag
6/9/2005	B9	<i>Pagrus pagrus</i>	286	1	Too small to tag
6/9/2005	B9	<i>Pagrus pagrus</i>	288	1	Too small to tag
6/9/2005	B9	<i>Pagrus pagrus</i>	263	1	Too small to tag
6/9/2005	B9	<i>Pagrus pagrus</i>	267	1	Too small to tag

Table 13. Continued.

Date	Site	Species	Length	Release Condition	Comments
6/9/2005	A20	<i>Rhomboplites aurorubens</i>	277	1	Too small to tag
6/9/2005	A20	<i>Pagrus pagrus</i>	286	1	Too small to tag
6/9/2005	A20	<i>Pagrus pagrus</i>	258	1	Too small to tag
6/9/2005	A20	<i>Pagrus pagrus</i>	274	1	Too small to tag
6/9/2005	A20	<i>Pagrus pagrus</i>	273	1	SE
6/9/2005	A20	<i>Pagrus pagrus</i>	282	1	BO
6/9/2005	A20	<i>Pagrus pagrus</i>	210	1	Too small to tag
6/9/2005	A19	<i>Lutjanus campechanus</i>	320	4	no tag, b/c gill was torn off
6/9/2005	A19	<i>Pagrus pagrus</i>	287	1	Too small to tag
6/9/2005	A19	<i>Pagrus pagrus</i>	286	1	Too small to tag
6/9/2005	A19	<i>Pagrus pagrus</i>	277	1	Too small to tag
6/9/2005	A19	<i>Pagrus pagrus</i>	217	1	Too small to tag
6/9/2005	A19	<i>Echeneis naucrates</i>	636	1	
9/27/2005	A12	<i>Arius felis</i>	375	1	
9/27/2005	A12	<i>Lutjanus campechanus</i>	235	1	Too small to tag
9/27/2005	A12	<i>Echeneis naucrates</i>	395	1	
9/27/2005	B8	<i>Lutjanus campechanus</i>	289	4	No tag; small and poor condition
9/27/2005	C32	<i>Lutjanus campechanus</i>	268	1	Too small to tag
9/27/2005	C32	<i>Lutjanus campechanus</i>	264	1	Too small to tag
9/27/2005	C32	<i>Lutjanus campechanus</i>	282	1	Too small to tag
9/27/2005	C32	<i>Lutjanus campechanus</i>	268	1	Too small to tag
9/27/2005	C32	<i>Lutjanus campechanus</i>	295	1	Too small to tag
9/27/2005	C32	<i>Arius felis</i>	360	1	
9/27/2005	C32	<i>Lutjanus campechanus</i>	259	1	Too small to tag
9/27/2005	C32	<i>Lutjanus campechanus</i>	263	1	Too small to tag
9/27/2005	C21	<i>Pagrus pagrus</i>	248	1	Too small to tag
9/27/2005	C 15	<i>Lutjanus campechanus</i>	248	1	Too small to tag
9/27/2005	C 15	<i>Lutjanus campechanus</i>	250	4	Too small to tag

Table 13. Continued.

Date	Site	Species	Length	Release Condition	Comments
9/27/2005	C15	<i>Arius felis</i>	330	1	
9/27/2005	C15	<i>Arius felis</i>	353	1	
9/27/2005	C15	<i>Arius felis</i>	320	1	
9/27/2005	C15	<i>Arius felis</i>	320	1	Sow rig; Too small to tag
9/27/2005	C15	<i>Lutjanus campechanus</i>	257	4	Swallowed hook; No tag
9/27/2005	C15	<i>Lutjanus campechanus</i>	311	4	No tag; poor condition and small
9/27/2005	A19	<i>Echeneis naucrates</i>	500	1	
9/27/2005	A19	<i>Rhomboplites aurorubens</i>	255	1	Too small to tag
9/27/2005	A19	<i>Echeneis naucrates</i>	480	1	
9/27/2005	A19	<i>Euthynnus alletteratus</i>	648	1	Sow rig; No tag
9/27/2005	B2	<i>Echeneis naucrates</i>	590	1	
9/27/2005	B2	<i>Echeneis naucrates</i>	562	1	

Table 14. Tagged fish recaptured during subsequent tagging trips. Date and site of initial tagging and of recapture are provided, as are release condition at initial tagging and at subsequent release. Lengths are total lengths in mm except fork length is reported for *Balistes capriscus*. Comments apply to release following recapture: SE = distended esophagus due to swim bladder expansion, BO = intestine protruding from anus, and BE = eyes bulging from pressure effects. Fish caught on sow rigs are indicated. See text for release condition descriptions.

Tag No.	Tag Date	Recap Date	Tag Site	Recap Site	Species	Initial Length	Recap Length	Initial Release Condition	Release Condition	Comments
6	3/26/05	6/9/05	B2	B2	<i>Balistes capriscus</i>	314	333	1	3	
7	3/26/05	6/9/05	B2	B2	<i>Balistes capriscus</i>	341	360	1	1	
8	3/26/05	6/9/05	B2	B2	<i>Lutjanus campechanus</i>	405	420	1	4	
12	3/26/05	6/9/05	B2	B2	<i>Balistes capriscus</i>	332	349	1	1	
13	3/26/05	6/9/05	B2	B2	<i>Balistes capriscus</i>	353	370	1	1	
15	3/26/05	6/9/05	B2	B2	<i>Balistes capriscus</i>	350	374	1	1	
17	3/26/05	6/9/05	B2	B2	<i>Lutjanus campechanus</i>	382	408	1	1	
43	3/26/05	6/9/05	B2	B2	<i>Epinephelus morio</i>	474	485	1	3	
49	3/26/05	6/9/05	C15	C15	<i>Balistes capriscus</i>	395	385	1	1	
82	3/26/05	6/9/05	C15	C15	<i>Lutjanus campechanus</i>	386	387	1	1	Sow rig
90	3/26/05	6/9/05	C15	C15	<i>Mycteroperca microlepis</i>	481	485	1	1	
121	3/26/05	6/9/05	A20	A20	<i>Rhomboplites aurorubens</i>	324	333	1	1	
134	3/26/05	6/9/05	B9	B9	<i>Lutjanus campechanus</i>	367	376	1	1	SE
138	3/26/05	6/9/05	B9	B9	<i>Balistes capriscus</i>	327	333	1	1	
172	3/26/05	6/9/05	B9	B9	<i>Lutjanus campechanus</i>	343	357	1	1	
176	3/26/05	6/9/05	B9	B9	<i>Lutjanus campechanus</i>	381	402	2	1	
187	3/26/05	6/9/05	C21	C21	<i>Balistes capriscus</i>	302	315	1	1	
214	3/26/05	6/9/05	C21	C21	<i>Epinephelus morio</i>	458	457	1	1	
281	3/26/05	6/9/05	C32	C32	<i>Epinephelus morio</i>	561	571	1	1	
285	3/26/05	6/9/05	C32	C32	<i>Epinephelus morio</i>	545	545	1	1	
304	3/26/05	6/9/05	C32	C32	<i>Mycteroperca microlepis</i>	520	518	1	1	
350	3/26/05	6/9/05	A12	A12	<i>Lutjanus campechanus</i>	353	388	1	1	
351	3/26/05	6/9/05	A12	A12	<i>Lutjanus campechanus</i>	360	380	1	1	
353	3/26/05	6/9/05	A12	A12	<i>Lutjanus campechanus</i>	508	522	1	1	
188	3/26/05	9/27/05	C21	C21	<i>Lutjanus campechanus</i>	322	391	1	1	
324	3/26/05	9/27/05	B8	B8	<i>Lutjanus campechanus</i>	411	468	1	1	
490	6/9/05	9/27/05	C15	C15	<i>Mycteroperca microlepis</i>	353	500	1	1	
554	6/9/05	9/27/05	B9	B9	<i>Lutjanus campechanus</i>	395	417	1	1	

Table 15. Recaptured tagged fish reported by fishers. Date and site of tagging and recapture are provided, as is release condition at tagging. See text for release condition descriptions. Tag lengths are total lengths in mm at the time of tagging; fork length is reported for *Balistes capriscus*. Recap lengths and locations were provided by fishers.

Fisher	Species	Tag No.	Tag Site	Rel. Cond.	Tag Length	Recap Length	Tag Date	Recap Date	Recap Location
Dennis Miller	<i>Pagrus pagrus</i>	53	C21	1	310		3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Pagrus pagrus</i>	93	C21	1	312		3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Pagrus pagrus</i>	64	C21	3	326		3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Pagrus pagrus</i>	46	C21	3	309		3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Pagrus pagrus</i>	94	C21	1	395		3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Mycteroperca microlepis</i>	48	C21	1	451		3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Mycteroperca microlepis</i>	72	C21	1	573	546.	3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Mycteroperca microlepis</i>	57	C21	1	430	432	3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Mycteroperca microlepis</i>	62	C21	1	444	406	3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Pagrus pagrus</i>	104	C21	1	292		3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Dennis Miller	<i>Pagrus pagrus</i>	86	C21	1	336		3/26/05	4/4/05	Loran TDs: 13288.8, 47024.1
Richard Rayburn	<i>Lutjanus campechanus</i>	143	B9	1	424	446	3/26/05	5/7/05	Public tanker 17mi. Off of Pensacola Beach
Scott Robson	<i>Mycteroperca microlepis</i>	67	C15	1	564	558	3/26/05	5/22/05	Off of Pensacola, on a reef he ran over
Tony Aguavo	<i>Lutjanus campechanus</i>	238	A34	1	387		3/26/05	6/3/05	10 mi. south of Pensacola
Richard Schreiner	<i>Mycteroperca microlepis</i>	170	B9	2	816	775	3/26/05	6/12/05	GPS: N30 00.594 W87 07.775, Anterres
Walter Mathews	<i>Mycteroperca microlepis</i>	174	B9	1	668		3/26/05	6/16/05	GPS: N30 00.594 W87 07.775, Anterres
Kerri Hughes	<i>Lutjanus campechanus</i>	234	A34	2	426		3/26/05	7/3/05	35 mi. SW of Destin
Daniel Malone	<i>Lutjanus campechanus</i>	236	A34	2	425		3/26/05	7/7/05	20 mi. south of Pensacola Beach
Will Gunion	<i>Mycteroperca phenax</i>	402	B8	1	445	457	6/9/05	7/26/05	25 mi. out of Perdido Pass
Tim Stewart	<i>Lutjanus campechanus</i>	524	B2	1	478		6/9/05	8/8/05	20 mi. SW Pensacola Pass, private reef
Tim Stewart	<i>Lutjanus campechanus</i>	505	B2	1	462		6/9/05	8/8/05	20 mi. SW Pensacola Pass, private reef
Tim Stewart	<i>Lutjanus campechanus</i>	514	B2	1	371		6/9/05	8/10/05	20 mi. SW Pensacola Pass, private reef
Tim Stewart	<i>Lutjanus campechanus</i>	503	B2	1	418		6/9/05	8/10/05	20 mi. SW Pensacola Pass, private reef
Tim Stewart	<i>Lutjanus campechanus</i>	10	B2	1	340		3/26/05	8/10/05	20 mi. SW Pensacola Pass, private reef
Ryan May	<i>Pagrus pagrus</i>	38	B2	2	312		3/26/05	8/15/05	10 mi. south of Perdido Pass

Table 15. continued.

Fisher	Species	Tag No.	Tag Site	Rel. Cond.	Tag Length	Recap Length	Tag Date	Recap Date	Recap Location
Teresa Hodge	<i>Lutjanus campechanus</i>	150	B9	1	421		3/26/05	8/15/05	South of Pensacola
Robert Key	<i>Lutjanus campechanus</i>	192	C21	1	405		3/26/05	9/6/05	GPS: N30 08.210 W87 14.210
B.J. Burkett	<i>Lutjanus campechanus</i>	426	C21	1	372	406	6/9/05	9/5/05	Loran TDs: 14035, 46098
Quinton Young	<i>Balistes capriscus</i>	411	B8	3	330	356	6/9/05	9/12/05	GPS: N30 03.467 W87 11.458
Richard Marshall	<i>Balistes capriscus</i>	112	A20	1	352	406	3/26/05	9/10/05	GPS: N29 58.500 W87 12.400
Thomas L. Hinote	<i>Lutjanus campechanus</i>	207	C21	1	373		3/26/05	9/15/05	GPS: N30 21.00 W86 26.17
Joan Head	<i>Lutjanus campechanus</i>	335	B8	1	360		3/26/05	9/18/05	20 mi. off Pensacola Beach
Steve Whiting	<i>Balistes capriscus</i>	391	B8	3	376		6/9/05	9/27/05	About 17 mi. south of Pensacola
Bill Coursen	<i>Balistes capriscus</i>	7	B2	1	341	450 TL	3/26/05	9/30/05	GPS: N30 07.0 W87 02.0
Clint Rutherford	<i>Balistes capriscus</i>	206	C21	1	332		3/26/05	10/10/05	Loran TDs: 13248.2, 47007.2
Leonard Anderson	<i>Mycteroperca phenax</i>	308	C32	1	340	406	3/26/05	10/10/05	GPS: N30 08.221 W87 14.218
Tim O'Brien	<i>Lutjanus campechanus</i>	545	B9	1	411	406	6/9/05	10/11/05	GPS: N30 00.594 W87 07.775, Anterres
Jamey Reynolds	<i>Mycteroperca phenax</i>	293	C32	1	420	446	3/26/05	10/11/05	GPS: N29 55.4 W87 28.4
Earle Rader	<i>Balistes capriscus</i>	44	B2	1	345	381	3/26/05	10/16/05	GPS: N30 05 W87 10
Eric Hayes	<i>Mycteroperca microlepis</i>	19	B2	1	492		3/26/05	10/21/05	25 mi. S of Pensacola
Paul Krause	<i>Balistes capriscus</i>	348	B8	1	390		3/26/05	10/28/05	Loran TDs: 13306.8 47102.8

REWARD



Please support reef fish research by reporting the capture of tagged fish.

Personnel from the Fisheries Lab at the University of West Florida, in conjunction with the Florida FWC*, are conducting a tagging study of adult reef fishes on artificial reefs in the north central Gulf of Mexico (www.UWFfishtag.org).



Please report capture of tagged fish to the UWF Fisheries Lab at 1-877-FishTag. Rewards are \$10 per tag return, with a chance at a \$500 cash prize drawn from all tag returners each year of the study.



*Funding for this study was generated by Florida saltwater

rising license revenues.