

PEARL TABLE 2

Pearl shell catch and effort in Zone 1 since the 1993 quota increase.

YEAR	WILD STOCK QUOTA	No. of CULTURE SHELLS	No. of MOP SHELLS	TOTAL SHELLS	DIVE HOURS	CULTURE SHELLS/HR	MOP SHELLS/HR	TOTAL SHELLS/HR
1993	115,000	79,465	0	79,465	2,395	33.2	0	33.2
1994	115,000	132,316 ¹	0	132,316	6,291	21.0	0	21.0
1995	115,000	121,312 ¹	0	121,312	6,247	19.4	0	19.4
1996	115,000	80,163	0	80,163	5,013	16.0	0	16.0
1997	115,000	110,348	0	110,348	9,494	11.6	0	11.6
1998	115,000	108,056	0	108,056	6,094	17.7	0	17.7
1999	115,000	90,414 ²	0	90,414	4,789	18.9	0	18.9
2000	115,000	66,772 ²	0	66,772	5,893	11.3	0	11.3
2001	115,000	68,931 ²	0	68,931	9,480	7.3	0	7.3
2002	55,000	29,126 ²	0	29,126	2,729	10.7	0	10.7
2003	45,000³	22,131²	0	22,131	1,647	13.4	0	13.4

Notes

1. Management arrangements in 1994 and 1995 allowed fishing of quota a year ahead. Licensees who utilised this option took a quota reduction in subsequent years.
2. Hatchery stock used during 1999–2003 reduced the need for wild-stock shell.
3. In 2003, the 115,000 Zone 1 quota was still maintained, however only 45,000 could be caught from wild stock due to hatchery shell substitution.

Wetline Fishing

This assessment, which utilised the CAES database, indicates that around a quarter (22%) of the state's wetline catch during 2002/03 was reported from this bioregion, which includes waters off both the Kimberley and Pilbara coasts. The top 12 species comprised Spanish mackerel (*Scomberomorus commerson*) 398 t, giant threadfin (*Eleutheronema tetradactylum*) 77 t, unspecified shark 19 t, goldband snapper (*Pristipomoides multidens*) 10 t, grey mackerel (*Scomberomorus semifasciatus*) 9 t, spangled emperor (*Lethrinus nebulosus*) 8 t, pig-eye shark (*Carcharhinus amboinensis*) 8 t, unspecified mackerel (Scombridae) 7 t, blacktip shark (*Carcharhinus* spp.) 7 t, trevally (Carangidae) 6 t, red emperor (*Lutjanus sebae*) 5 t and narrow sawfish (*Anoxypristis cuspidatus*) 5 t. The latter is being increasingly targeted for its fins.

An interim management plan for the troll fishery for mackerel, details of which are reported on pp. 141-146, will commence later in 2004. The majority of threadfin were taken by net fishers south of the Kimberley Gillnet and Barramundi Managed Fishery. Most other species are taken by line fishing off the Pilbara coast.

RECREATIONAL FISHERIES

Regional Research Overview

Recreational fishing is a popular activity in the north coast bioregion, accounting for 5% of the state's fishing effort or an estimated 367,000 fishing days in 2003/04 (Baharthah 2004).

Scientific information to support recreationally fished stock management in the north coast bioregion has come largely from previous Department of Fisheries studies focused on commercial fisheries. This research has provided good biological data on the major lethrinid species (nor-west snappers), the red emperor and some related lutjanid species, the cods and coral trout, in the North West Shelf sector. A three-year research project on mackerel species has now been completed and provides detailed biological and fishery data on these important recreational species.

A major project completed in 2004 collected baseline data on the inshore finfish species targeted by recreational anglers across the north coast bioregion. In addition, a parallel collaborative project with Murdoch University has provided biological data on the species subject to shore-based fishing by both recreational and commercial fishers.

A 12-month creel survey of recreational boat-based and shore-based fishing in the Pilbara region of Western Australia was conducted between December 1999 and November 2000 (Williamson et al., in prep.). The survey area incorporated the region from Onslow up to and including Broome.