

Yellowfin Bream

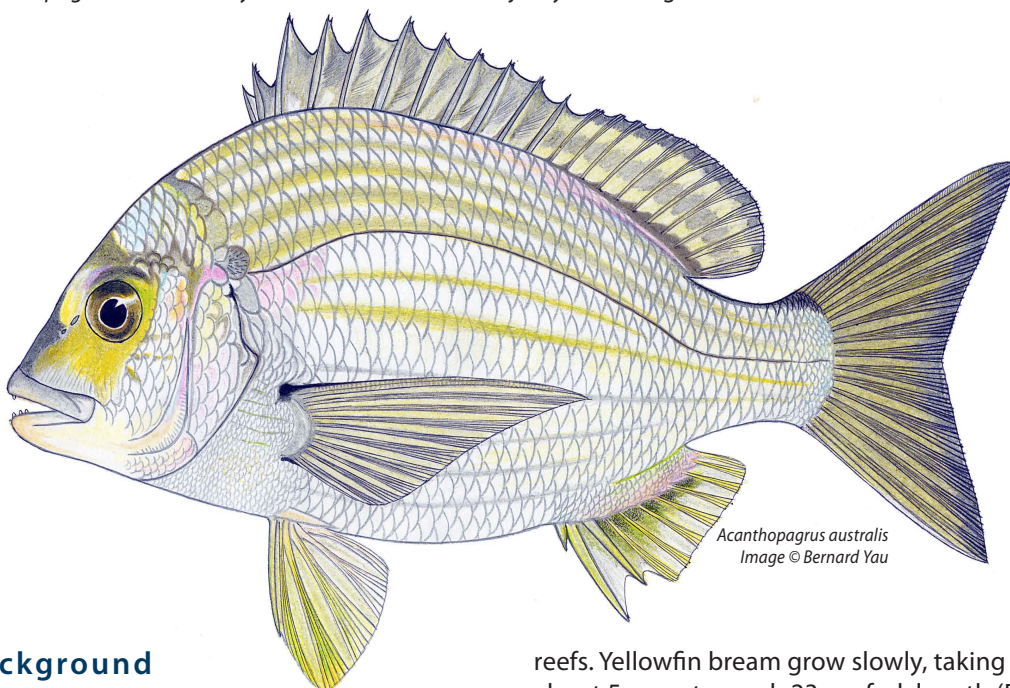
(*Acanthopagrus australis*)

EXPLOITATION STATUS FULLY FISHED

The yellowfin bream has a long history of stability of both the length composition and commercial catch rate data. The species is the basis of very significant recreational and commercial fisheries in NSW.

SCIENTIFIC NAME **STANDARD NAME** **COMMENT**

Acanthopagrus australis yellowfin bream Majority of landings.



Background

Yellowfin bream (*Acanthopagrus australis*) are endemic to Australia and occur from Townsville in Queensland to the Gippsland lakes in Victoria. In NSW waters, yellowfin bream are found primarily within estuaries and along nearshore beaches and rocky reefs, although they also occur within the lower freshwater reaches of coastal rivers. Within estuaries, yellowfin bream are found in association with all types of habitat, including seagrass beds, mangroves, bare substrates and rocky reefs. They eat a wide variety of foods, including small fish, molluscs, crustaceans and worms.

Spawning occurs in inshore waters near estuary entrances during winter. The larvae enter estuaries and the small juveniles subsequently live in sheltered shallow water habitats (particularly seagrass beds and mangrove channels). Larger juveniles occur in slightly deeper waters, and are particularly common around estuarine and near shore coastal

reefs. Yellowfin bream grow slowly, taking about 5 years to reach 23 cm fork length (FL). They mature at around 22 cm and appear to undertake extensive pre-spawning migrations. Maximum length is about 55 cm FL and maximum weight about 3.7 kg. Adults may return to estuarine waters after spawning.

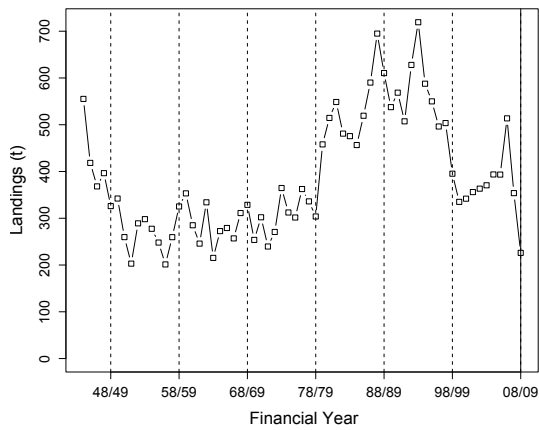
The majority of bream taken in the Estuary General Fishery are caught in mesh and hauling nets with a smaller number taken in fish traps. The highest commercial catches of bream occur in autumn and winter. Yellowfin bream are also taken in very large quantities by recreational fishers and recreational landings are estimated to be about double commercial landings.

Reported commercial landings of bream declined during the 1990s. This decline was at least partly attributable to phasing out the use of pound (figure six) nets in Port Stephens and adjoining coastal waters. There was also a decline in the amount of fishing effort reported in estuaries during this time. Commercial

landings have stabilised in recent years, and the age and length compositions of catches have remained relatively stable, indicating no declines in older fish.

Black bream (*A. butcheri*) is a similar species to yellowfin bream and is found in estuarine waters on the NSW coast south of Myall Lakes. They are almost exclusively found in estuarine waters, and generally only enter ocean waters after periods of flood. Black bream are often reported as yellowfin bream during catch reporting, as distinguishing the species by visual examination can be very difficult. The differentiation between the species is made more difficult through a significant percentage of hybrids that exist as a result of the two species interbreeding.

Historical Landings of Yellowfin Bream



Commercial landings (including available historical records) of yellowfin/black bream for NSW from 1944/45 to 2008/09 for all fishing methods.

Additional Notes

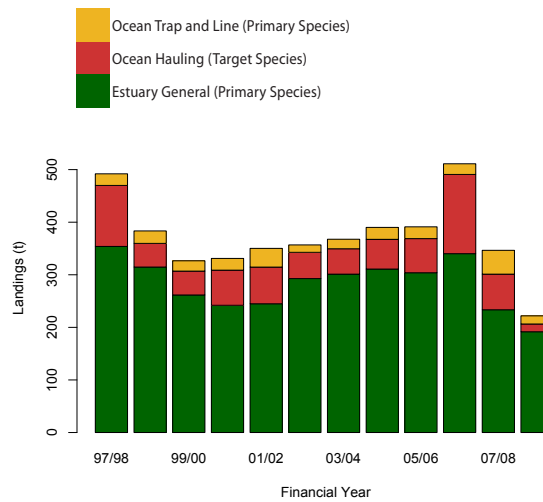
- Length frequency has been stable since the 1950s and the age distribution of commercial catches in the early 1990s was mainly 3-8 year old fish (Gray *et al.*, 2000).
- There is a minimum legal length of 25 cm total length (approximately 22.5 cm FL) for yellowfin and black bream and a combined recreational bag limit of 20 for all bream and tarwhine.

Catch

Recreational Catch of Yellowfin Bream

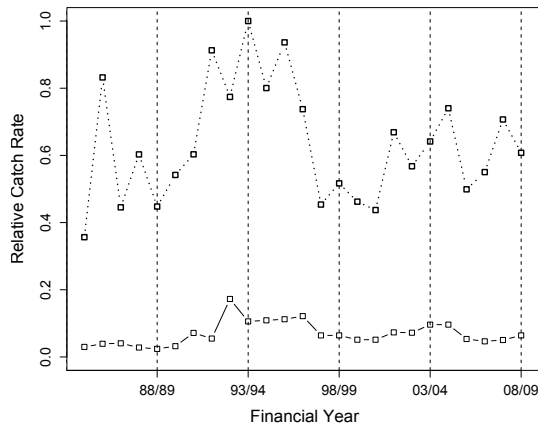
The annual recreational harvest of yellowfin bream in NSW is likely to lie between 820 and 1070 t. This estimate is based upon the results of the offsite National Recreational and Indigenous Fishing Survey (Henry and Lyle, 2003) and onsite surveys undertaken by I & I NSW.

Landings by Commercial Fishery of Yellowfin Bream



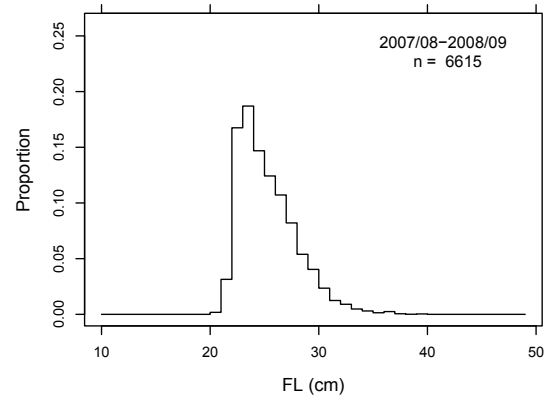
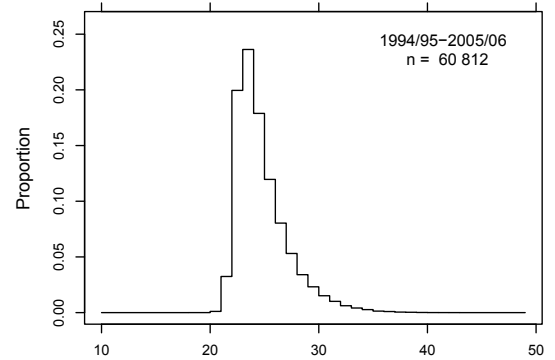
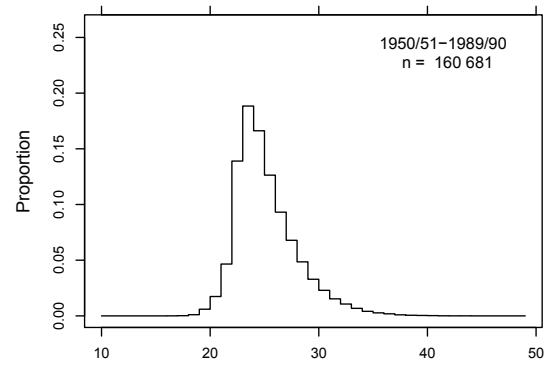
Reported landings of yellowfin bream by NSW commercial fisheries from 1997/98. Fisheries which contribute less than 2.5% of the landings are excluded for clarity and privacy.

Catch Per Unit Effort Information of Yellowfin Bream Harvested by Fish Trapping in NSW

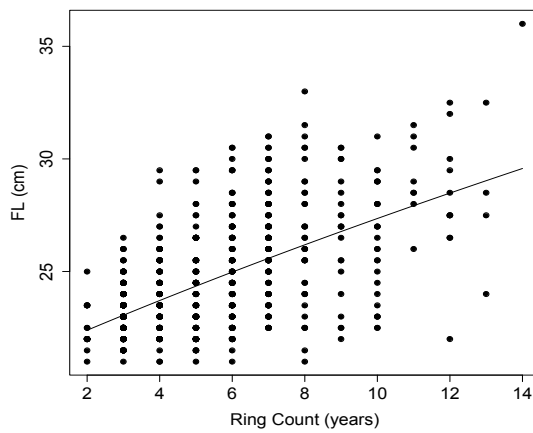


Catch rates of yellowfin bream harvested using fish trapping for NSW. Two indicators are provided: (1) median catch rate (lower solid line); and (2) 90th percentile of the catch rate (upper dashed line). Note that catch rates are not a robust indicator of abundance in many cases. Caution should be applied when interpreting these results.

Length Frequency of Yellowfin Bream



Growth Curve of Yellowfin Bream



Age-length data with fitted growth curve for yellowfin bream (Ochwada *et al.*, 2008). Lengths are presented as fork length (FL).

The length distribution of NSW commercial landings of yellowfin bream has been reasonably stable since the 1950s. Prior to the 1950s, the minimum legal length (MLL) for bream in NSW was 9 inches (approximately 22 cm total length (TL) or 19 cm fork length (FL)), but since the 1960s the MLL has been 25 cm TL (approximately 22.5 cm FL).

Further Reading

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- Steffe, A.S. and D.J. Chapman (2003). [A survey of daytime recreational fishing during the annual period, March 1999 to February 2000, in Lake Macquarie, New South Wales](#). 124 pp. Sydney, NSW Fisheries.
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- Please visit the CSIRO website, <http://www.marine.csiro.au/caab/>, and search for the species code (CAAB) 37 353004 and 37 353003, common name or scientific name to find further information about the species.