

BRS SEMINAR SERIES PRESENTS:

Friday 8 April

'Australia takes stock of its Fish Resources: Assessment of Commonwealth-Managed Fisheries'.

Kevin McLoughlin – BRS

Since 1992, the Bureau of Rural Sciences (BRS) has provided governments, industry and the community with independent reviews of the status of fish stocks for which the Australian Government has management responsibility.

The reports provide a means of monitoring the status of community owned fish resources on which each fishery is based.

In the most recent status reports, of 74 stocks classified, 17 were **overfished**, 17 were **not overfished** and 40 were of **uncertain** status due to inadequate information. With appropriate and efficient management, the objective is to achieve healthy fish stocks. Fish stocks managed by the Australian Government form the basis of the high quality seafood products that the fishing industry provides to domestic and export markets.

This seminar will provide a snapshot of progress toward achieving sustainability for these valuable industries.

**11.00am - 12:00noon (morning tea at 10:45am)
Edmund Barton Conference Centre (in the courtyard)
Edmund Barton Building
Kings Avenue, Canberra**

Bookings not required.

Parking is a problem, we suggest taking a taxi.

For further details, please call the BRS Seminar Coordinator on 6272 3440.

For further information on BRS Seminars or to obtain papers/presentations supplied by previous seminar presenters, please visit our website at: www.brs.gov.au/brsseminars

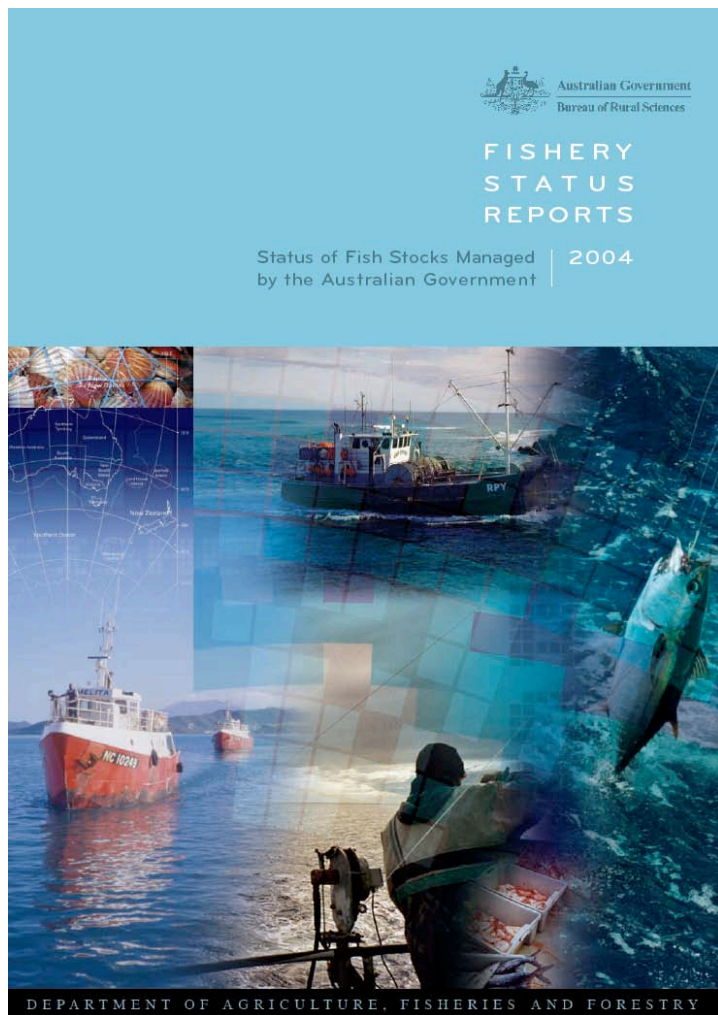


Australian Government
Bureau of Rural Sciences

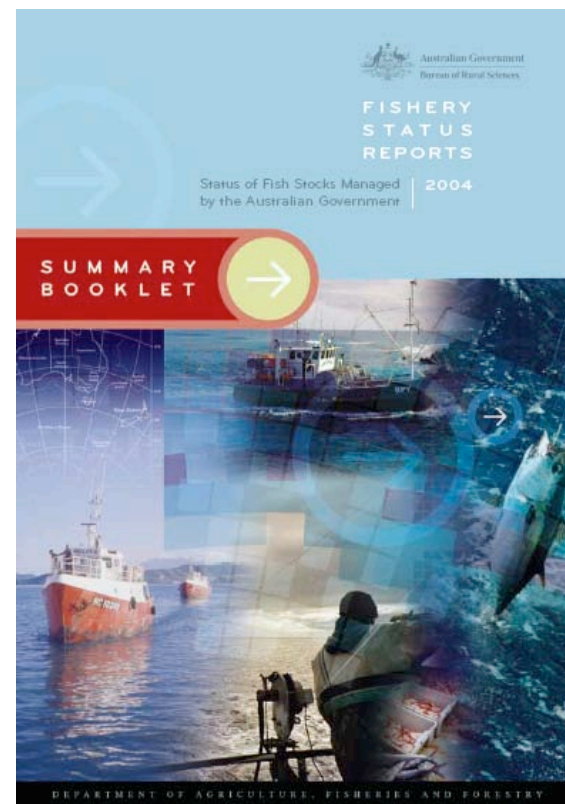
Bureau of Rural Sciences

SCIENCE FOR DECISION MAKERS

DEPARTMENT OF AGRICULTURE, FISHERIES AND FORESTRY



Fishery Status Reports 2004



SCIENCE FOR DECISION MAKERS

OUR FISHING INDUSTRY: PAST AND PRESENT

Table 1 compares the current state of our fishing industry to that of 50 years ago. The value, production and trade statistics are for fisheries managed by the Australian Government and state governments. In 2002–03 Australian Government-managed fisheries landed \$417 million worth of seafood compared to \$1,888 million for state-managed fisheries and aquaculture.

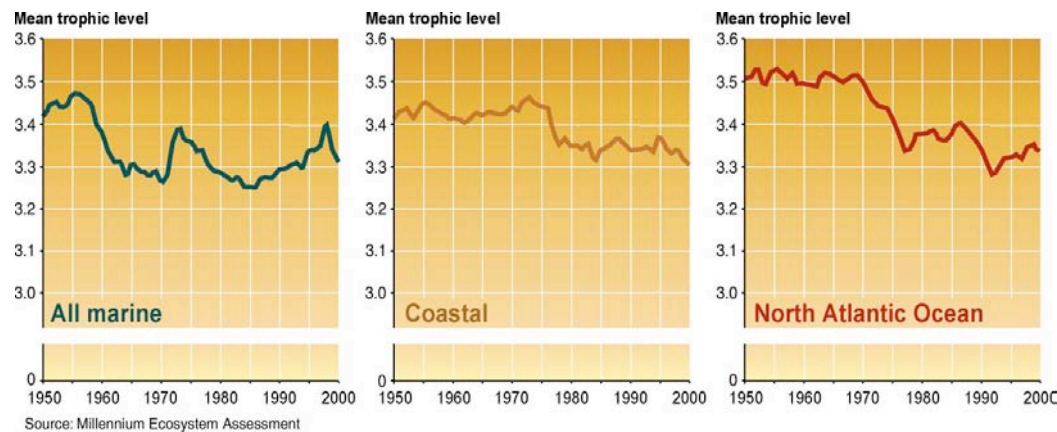
TABLE 1

The Australian fishing industry, 1953 and 2003

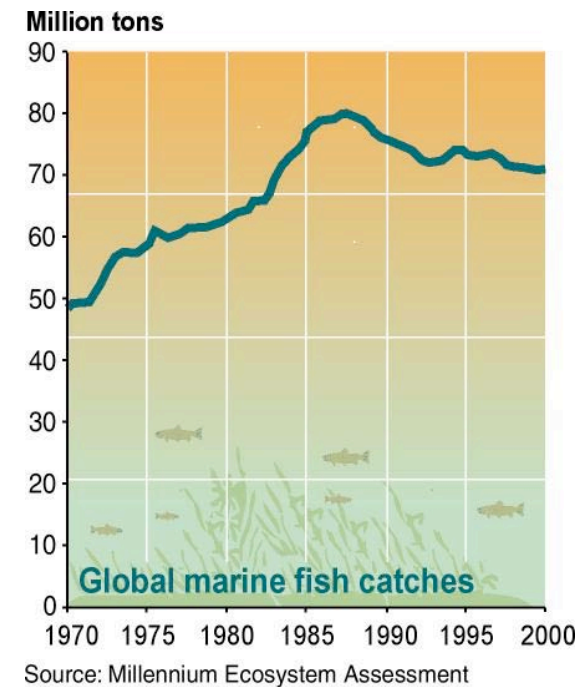
Feature	1953	2003
Australia's population size	9 million ^a	20 million ^b
Value of seafood production	\$12 million ^c	\$2,297 million ^d
Total seafood production	49,754 t ^c	249,012 t ^d
Exports of seafood	9,365 t ^c	60,161 t ^d
Imports of seafood	42,106 t ^c	164,673 t ^d
Consumption of seafood, per person	9 kg ^e	21 kg ^f
Biggest fishery ⁱ	South East Trawl (5,571 t) ^g	South East Trawl (30,512 t) ^d
Most valuable fishery ⁱ	South East Trawl (\$1.4 million) ^h	Northern Prawn (\$83 million) ^d

Millennium Assessment Capture Fisheries

25% of commercially exploited marine fish stocks are overharvested (*high certainty*)



Trophic level of fish captured is declining in marine and freshwater systems



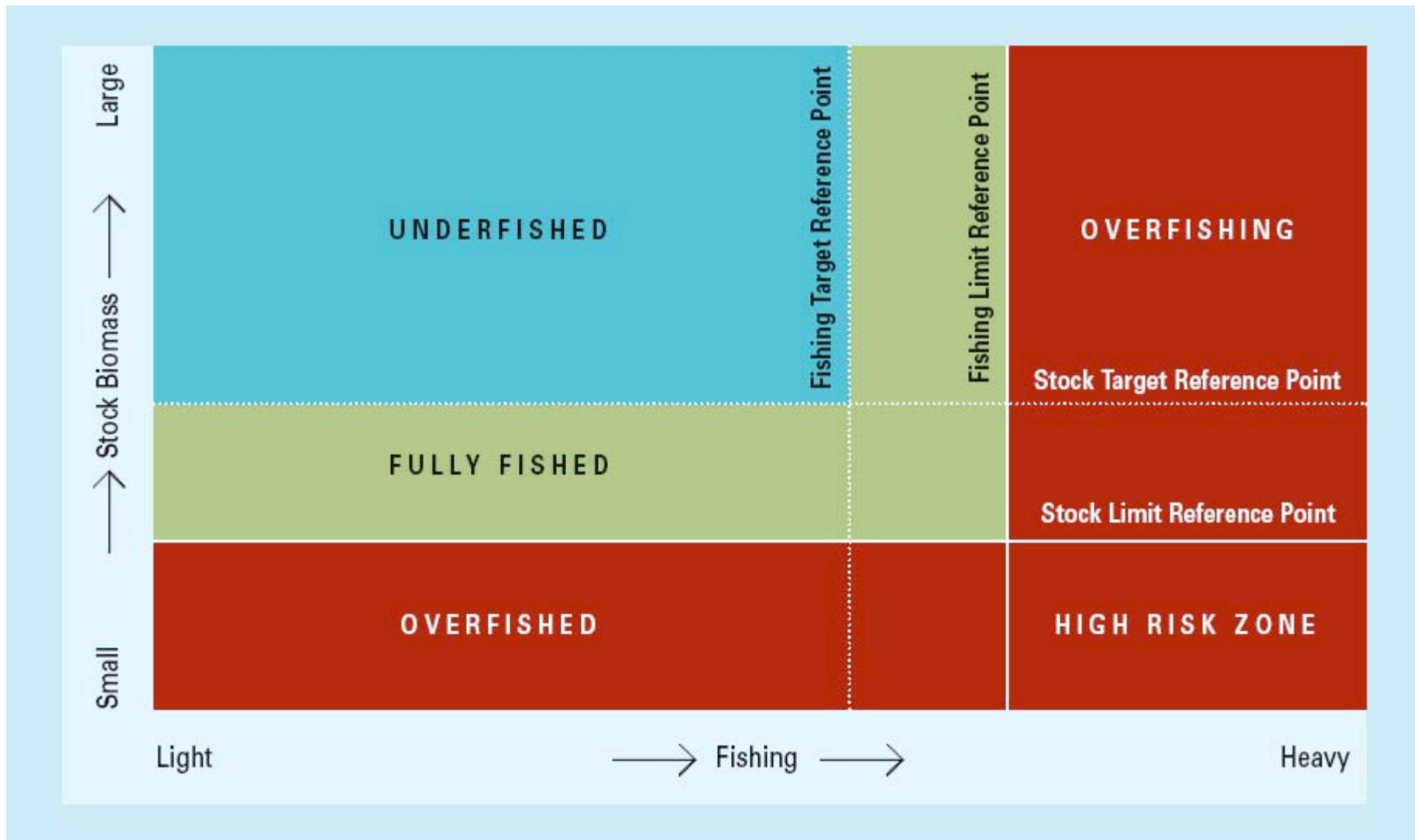
Marine fish harvest declining since the late 1980s

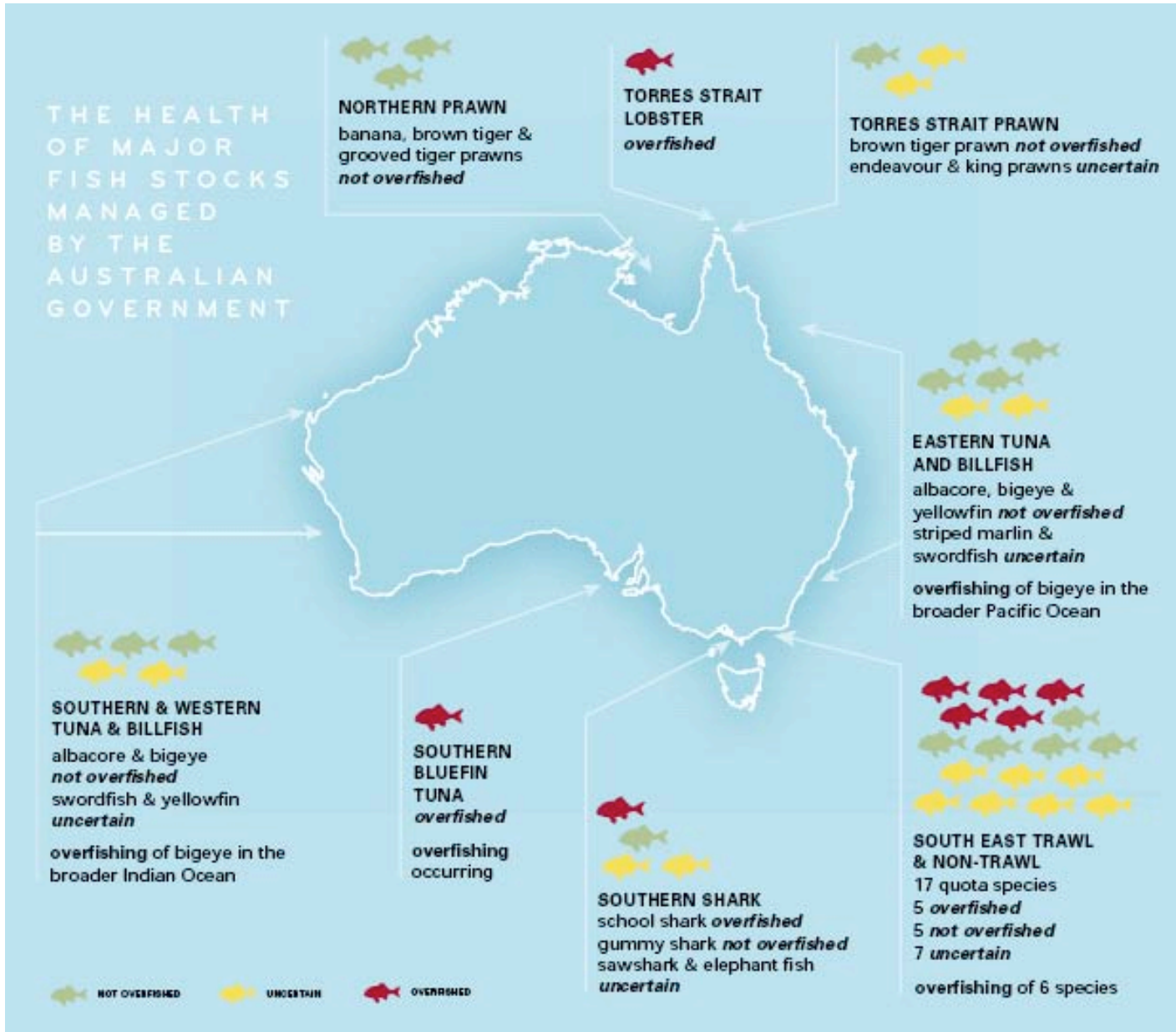
US fisheries status reporting



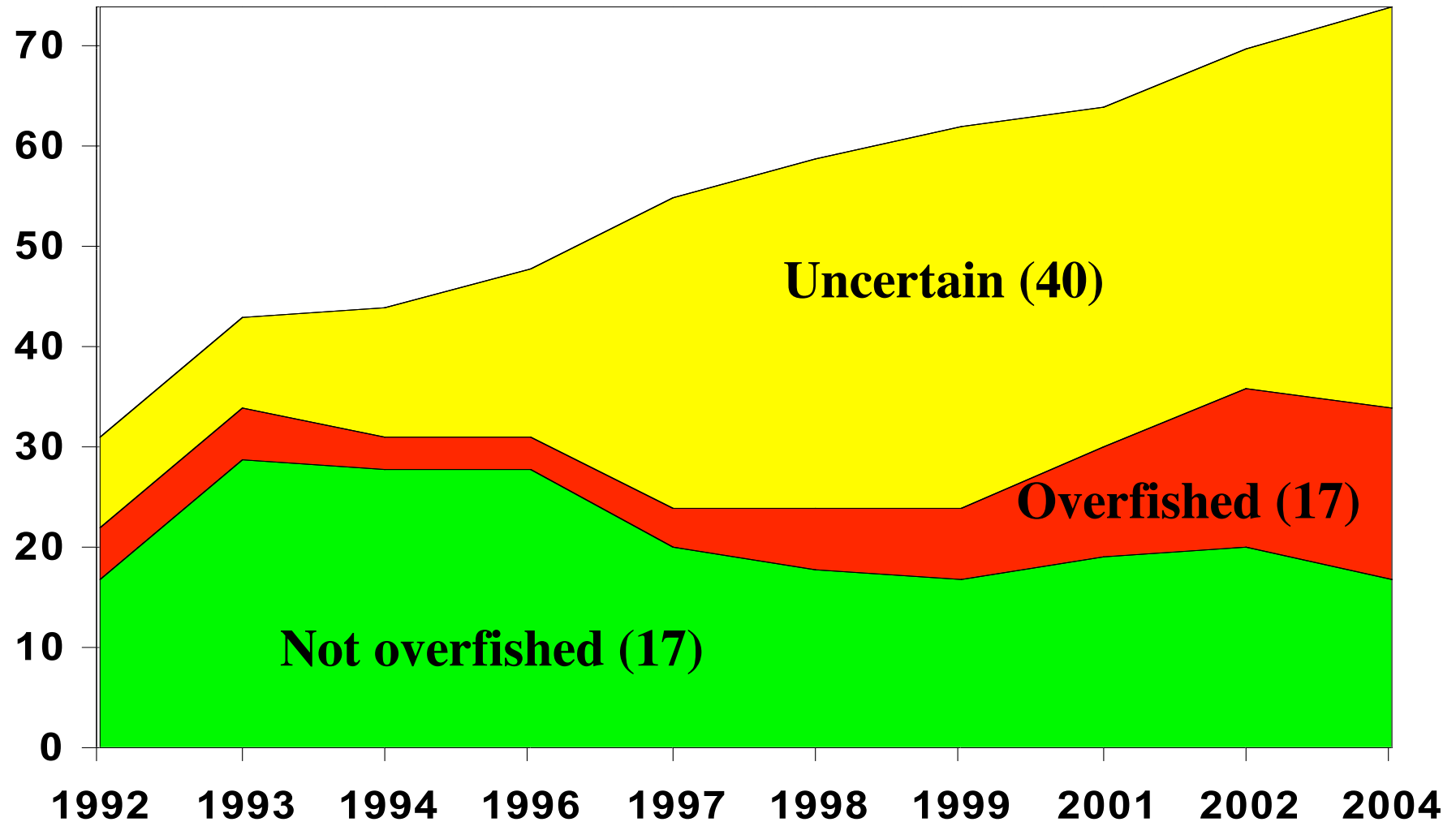
2003 (7th annual report)

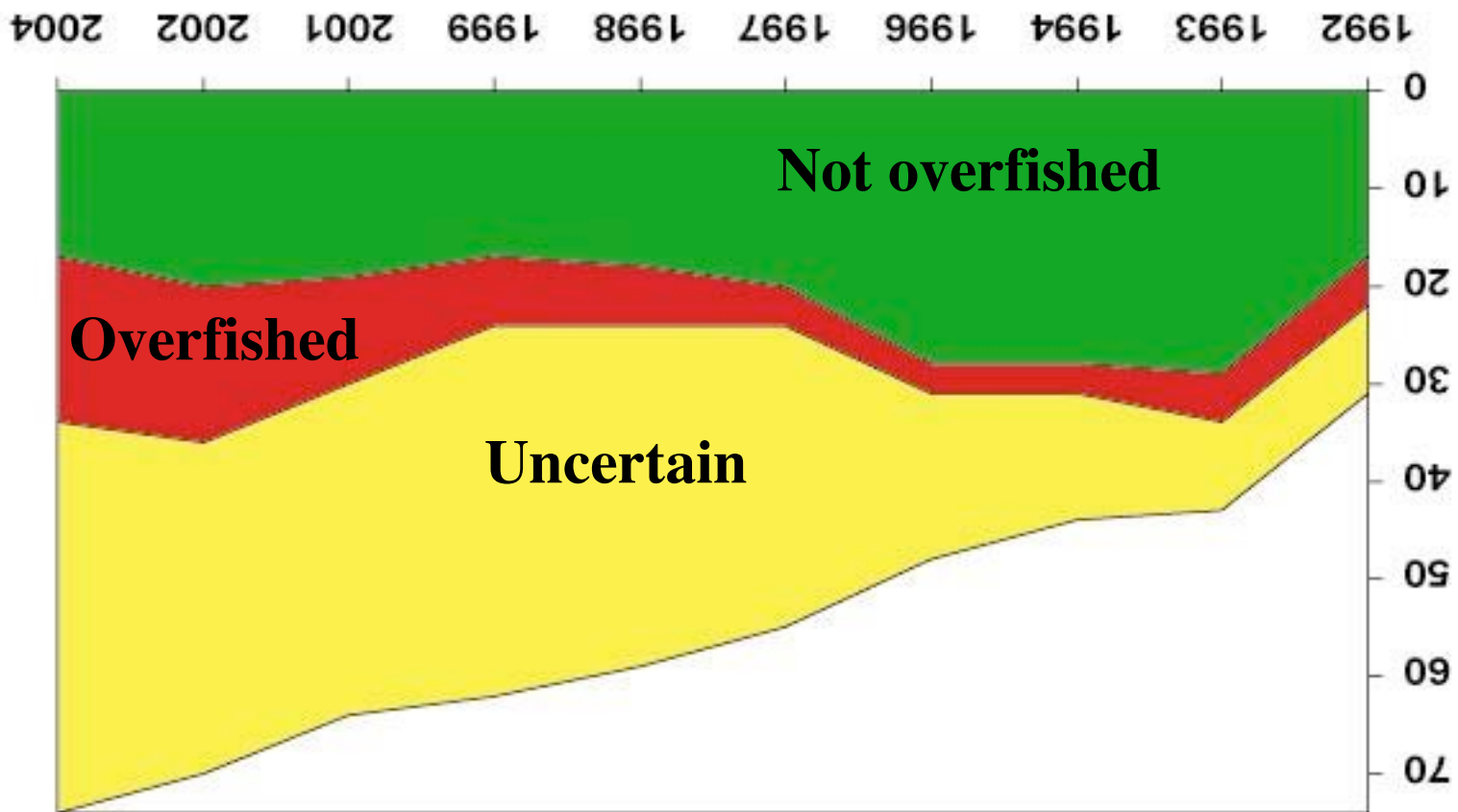
- ~900 known fished major or minor marine stocks
- ~400 stocks whose status is known
- ~136 of the 400 stocks were classified as overfished or experiencing overfishing





Fishery status classification by year





COMMON NAME **STOCK STATUS**
STATUS REPORT YEAR: 92 93 94 96 97 98 99 00-01 02-03 04

AFMA-MANAGED FISHERIES

Brown tiger prawn	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Overfished	Overfished	Overfished	Overfished	Not Overfished
Grooved tiger prawn	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Overfished	Overfished	Overfished	Not Overfished	Not Overfished
Blue warehou	Uncertain	Uncertain	Not Overfished	Not Overfished	Uncertain	Not Overfished	Not Overfished	Overfished	Overfished	Overfished
Gemfish (eastern)	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished
Pink ling	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Overfished
South East Fishery orange roughy	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Overfished	Overfished	Overfished
Redfish	Overfished	Overfished	Uncertain	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Overfished	Overfished	Overfished
Silver trevally	Uncertain	Uncertain	Uncertain	Uncertain	Uncertain	Uncertain	Uncertain	Uncertain	Overfished	Overfished
Gummy shark	Overfished	Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished
School shark	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished
Southern scallop	Status not Classified	Status not Classified	Status not Classified	Uncertain	Uncertain	Uncertain	Overfished	Overfished	Overfished	Overfished
Black teatfish* (Coral Sea)	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Overfished	Overfished

KEY: Not Overfished Overfished Uncertain Status not Classified

COMMON NAME STATUS REPORT YEAR:	STOCK STATUS									
	92	93	94	96	97	98	99	00-01	02-03	04

INTERNATIONALLY MANAGED FISHERIES

Southern bluefin tuna	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished
Bigeye tuna (Indian Ocean)	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Uncertain	Uncertain	Uncertain	Uncertain	Overfished	Overfished
Bigeye tuna (Pacific Ocean)	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Uncertain	Uncertain	Not Overfished	Not Overfished	Overfished

AUSTRALIA-NEW ZEALAND-MANAGED FISHERY

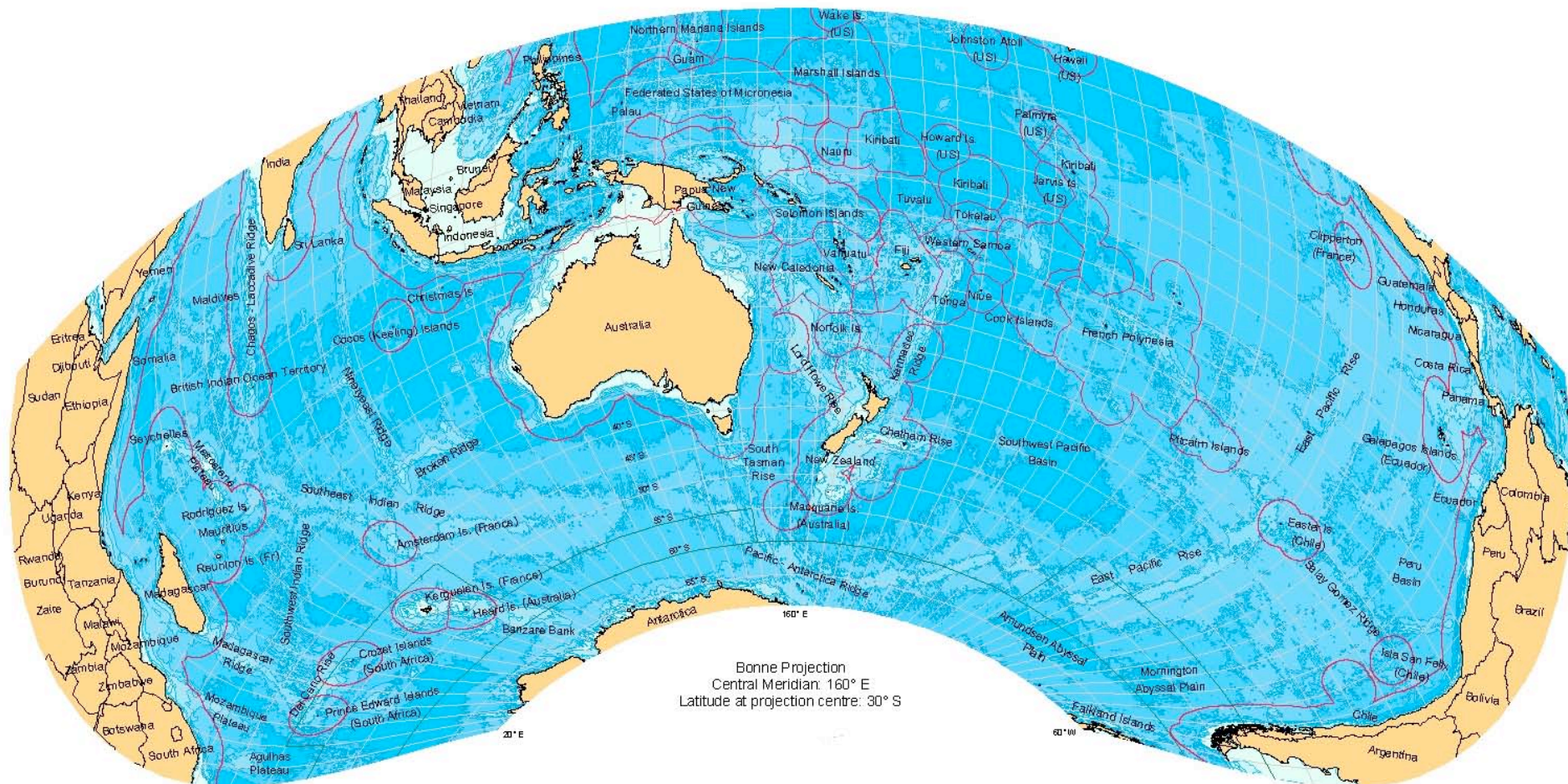
Orange roughy (South Tasman Rise)	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Uncertain	Uncertain	Overfished	Overfished
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PROTECTED ZONE JOINT AUTHORITY FISHERIES

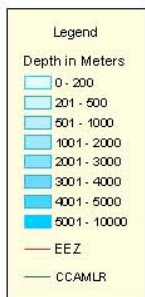
Black teatfish* (Torres Strait)	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Overfished	Overfished
Sandfish* (Torres Strait)	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Overfished	Overfished	Overfished	Overfished	Overfished	Overfished
Surf redfish* (Torres Strait)	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Status not Classified	Overfished	Overfished
Tropical rock lobster (Torres Strait)	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Not Overfished	Uncertain	Overfished	Overfished	Overfished

* Also known as *bêche-de-mer*, *trepang* or *sea cucumber*

KEY:  Not Overfished  Overfished  Uncertain  Status not Classified



Bonne Projection
 Central Meridian: 160° E
 Latitude at projection centre: 30° S



Exclusive Economic Zones of the Indian and southern Pacific Oceans



Exclusive Economic Zone boundary data for the South Pacific Islands was obtained from material collected from the Forum Fisheries Agency. All other EEZ boundary data were obtained from the GEBCO-07 coastline.

The depth layer was derived from a bathymetry grid with a spatial resolution of 2 arc minutes and a vertical resolution of 1 to 12 km. The grid was derived by combining available depth soundings with high-resolution marine gravity information from the Geosat and ERS-1 space craft.

International boundaries shown on this map are the intellectual property of Earth Systems Research Institute, Inc. (ESRI) of 380 New York Street, Redlands, California 92373-8100, USA and are used by permission.



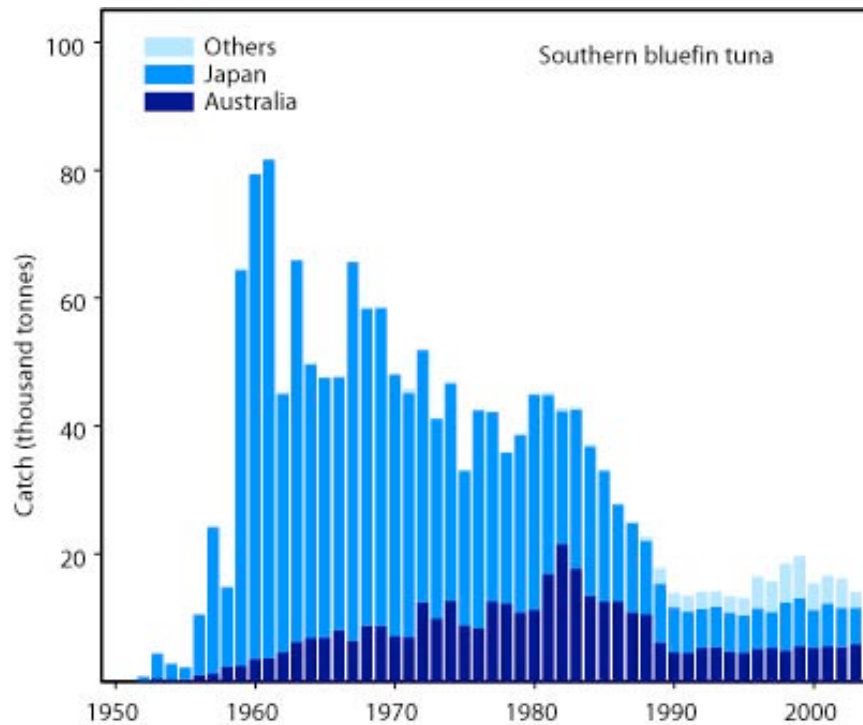
"Science for decision makers"

The Bureau of Rural Sciences is the scientific agency of Agriculture, Fisheries & Forestry - Australia

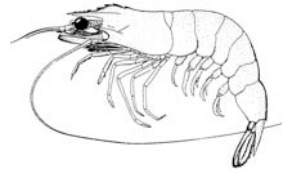
© Commonwealth of Australia 2002



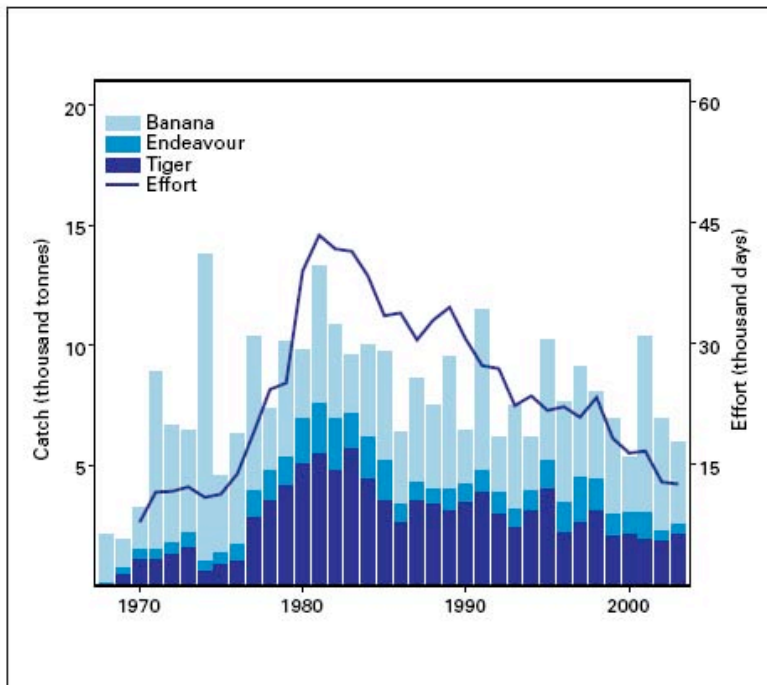
Southern bluefin tuna



- International fishery for SBT, managed by CCSBT since 1994
- Inclusion of Korea and Taiwan
- Overfished status has persisted for many years
- Parent stock low; indications of poor recruitment



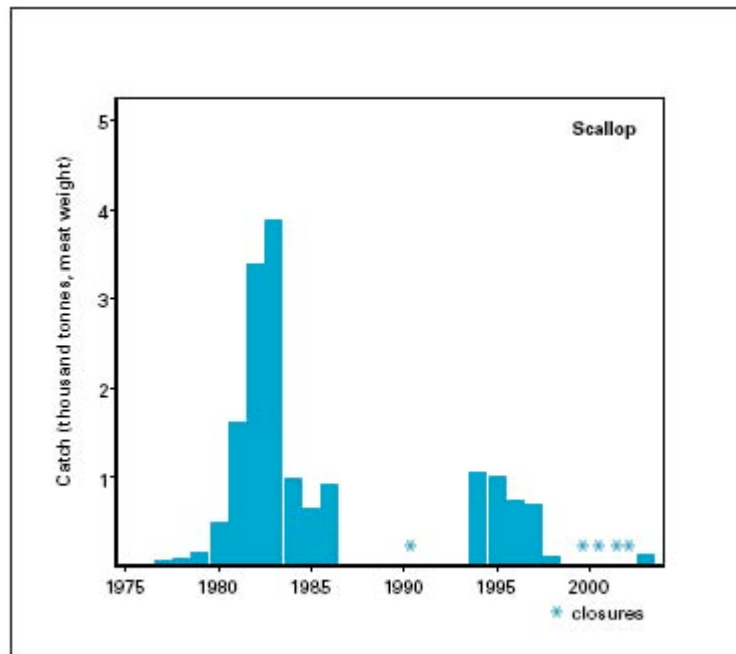
Northern Prawn Fishery



- Most valuable fishery managed by Commonwealth
- 3 species dominate retained catch
- Tiger prawns previously overfished
- Recovery following major effort reductions



Bass Strait Scallop Fishery

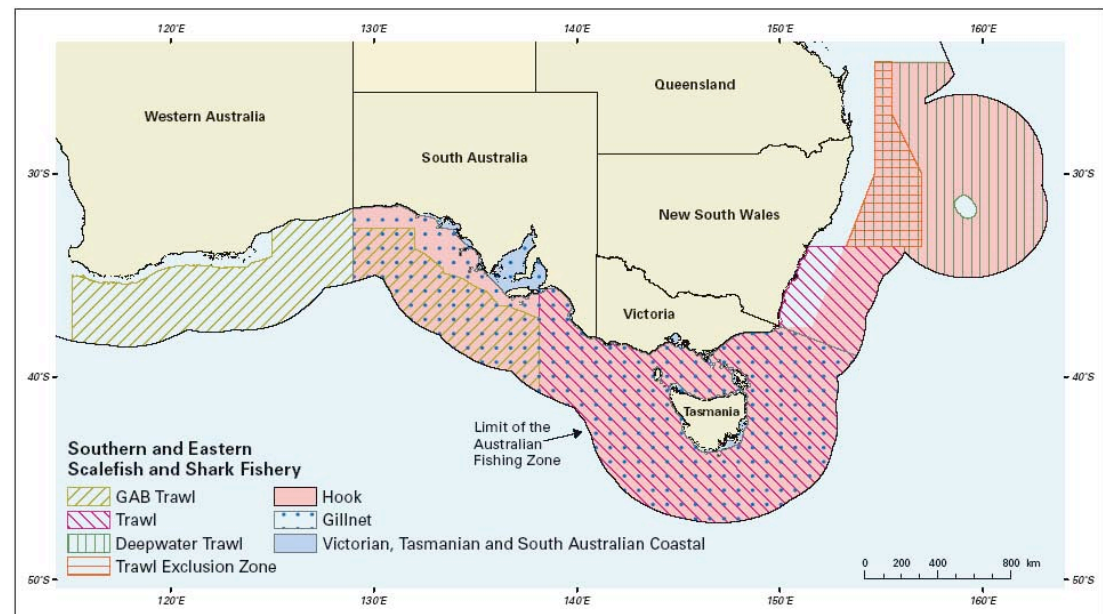


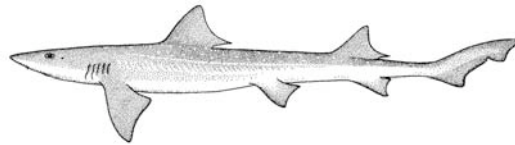
- Abundance remains low
- Only known aggregation is east of Flinders Island
- Annual surveys and decision rules
- Total allowable catches on opened beds



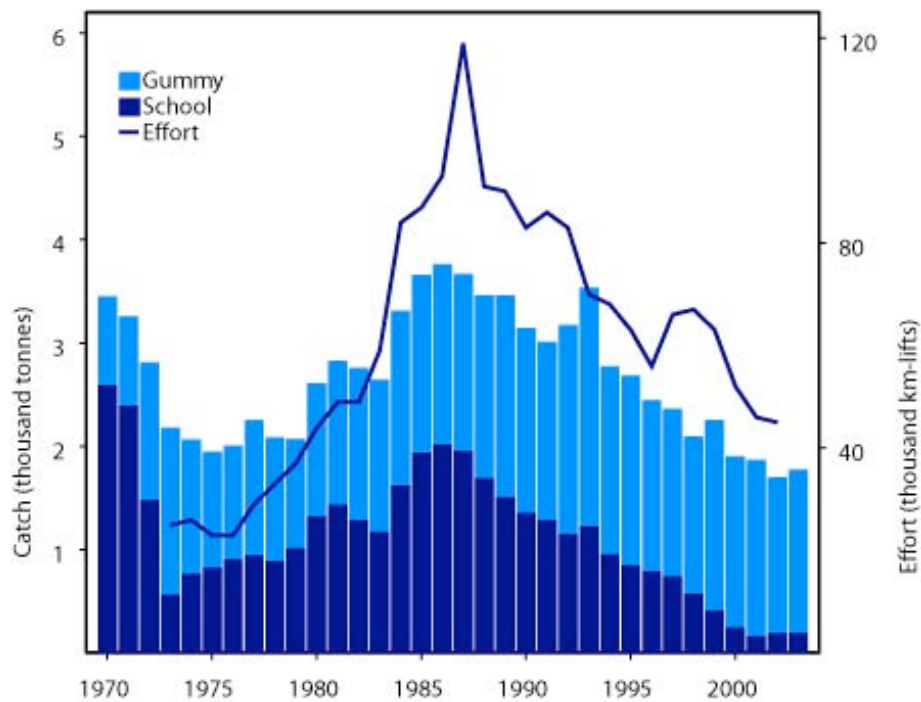
Southern and Eastern Scalefish and Shark Fishery

- Important Commonwealth fishery formed by merging several fisheries
- Supplies much of the fresh fish to south-eastern Australia as well as exporting

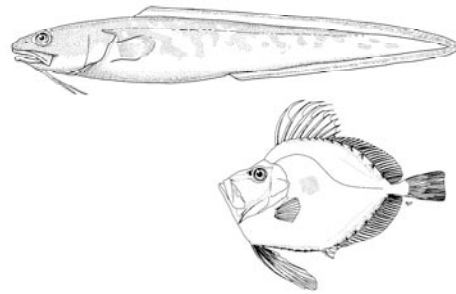




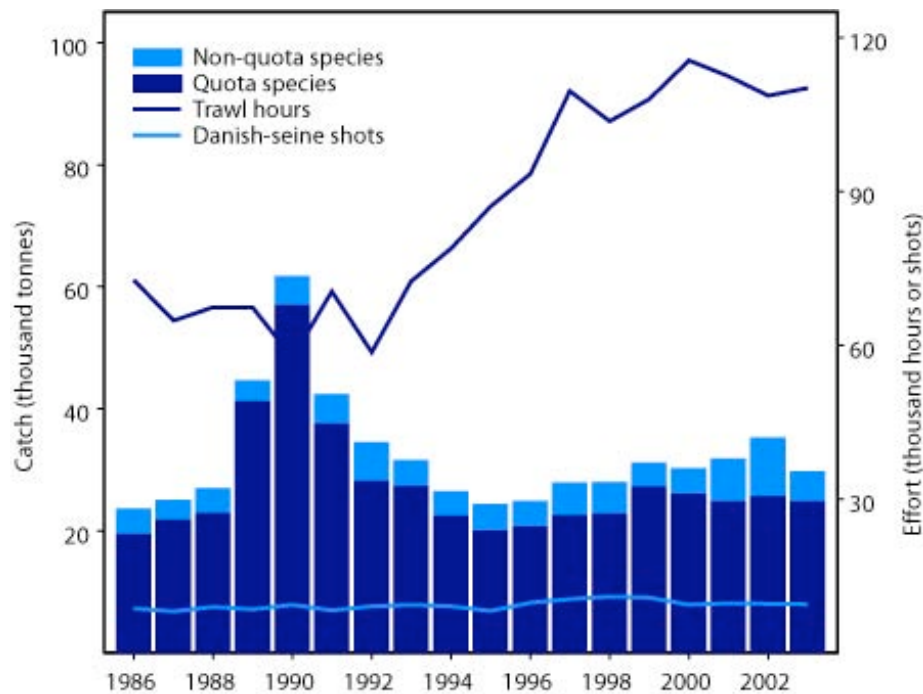
Southern shark



- One of Australia's oldest fisheries
- School shark and gummy shark the major species – managed via ITQs
- School shark overfished
- Questions over recovery

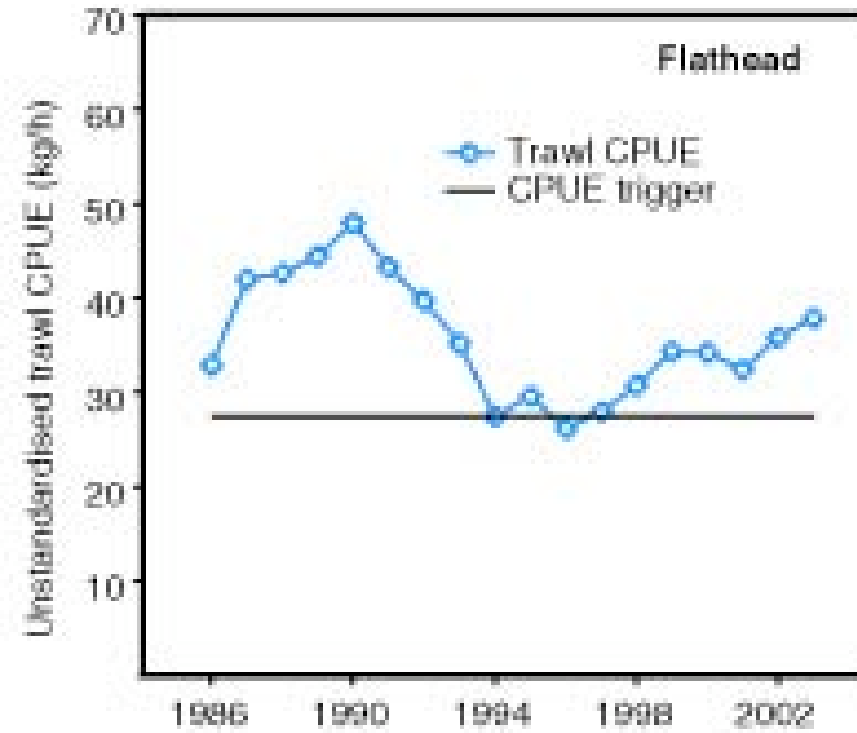
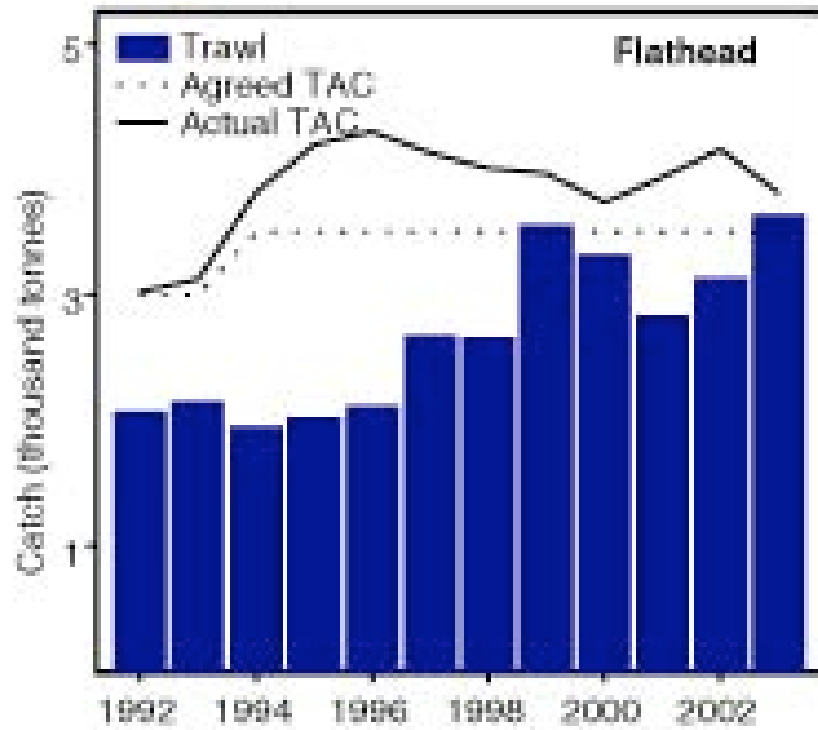
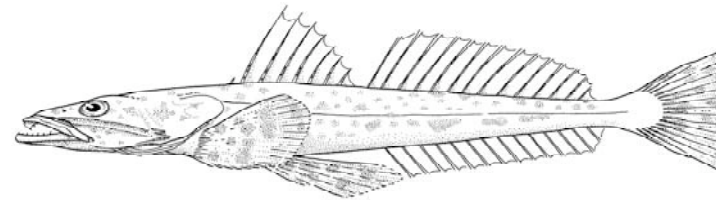


South East Fishery – trawl and non-trawl

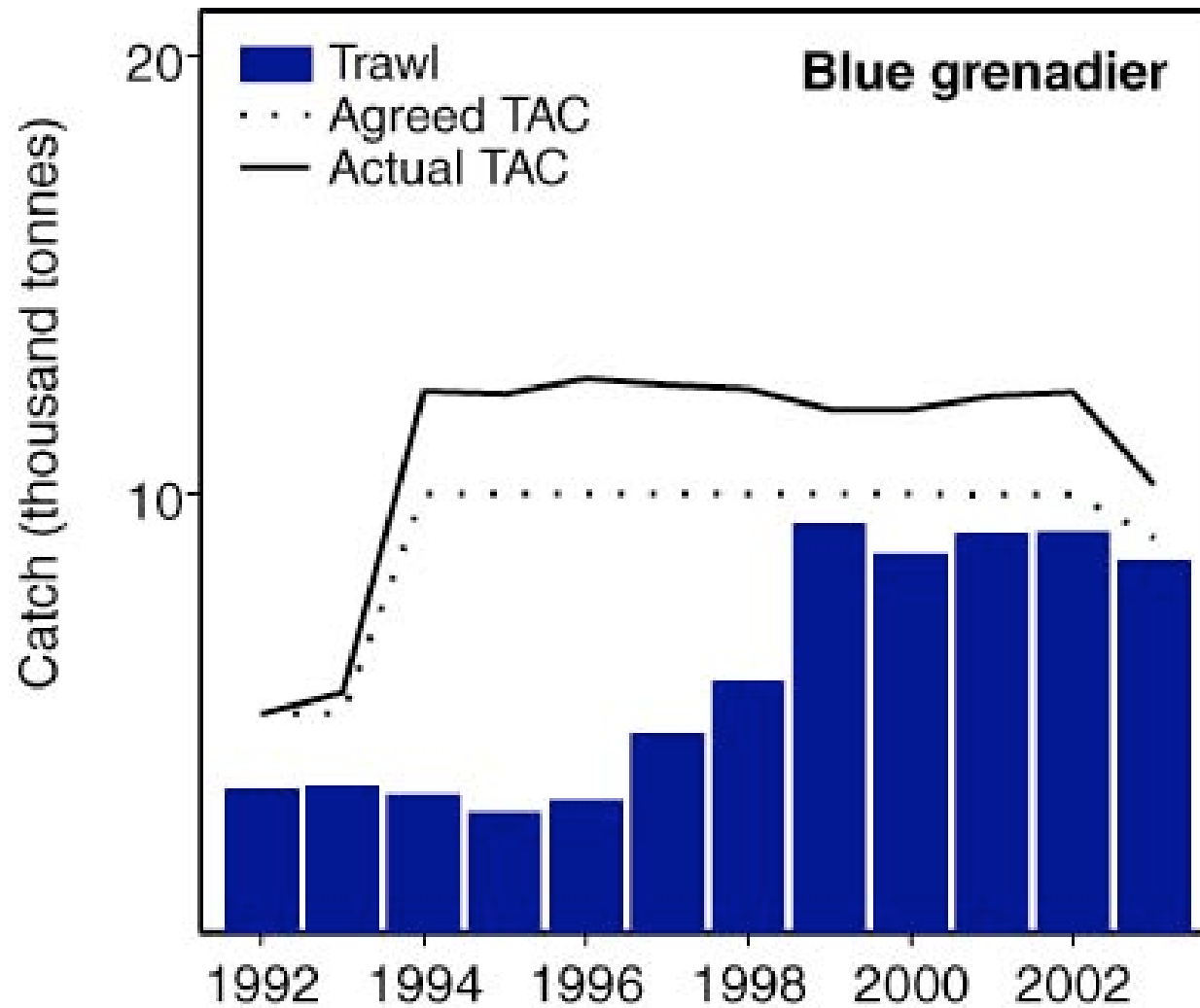
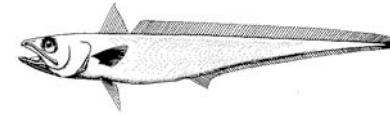


- Managed via quotas since early 1990s (17 species)
- 5 species overfished; 5 not overfished and 7 uncertain
- Overfishing of 6 species
- Continued effort increase

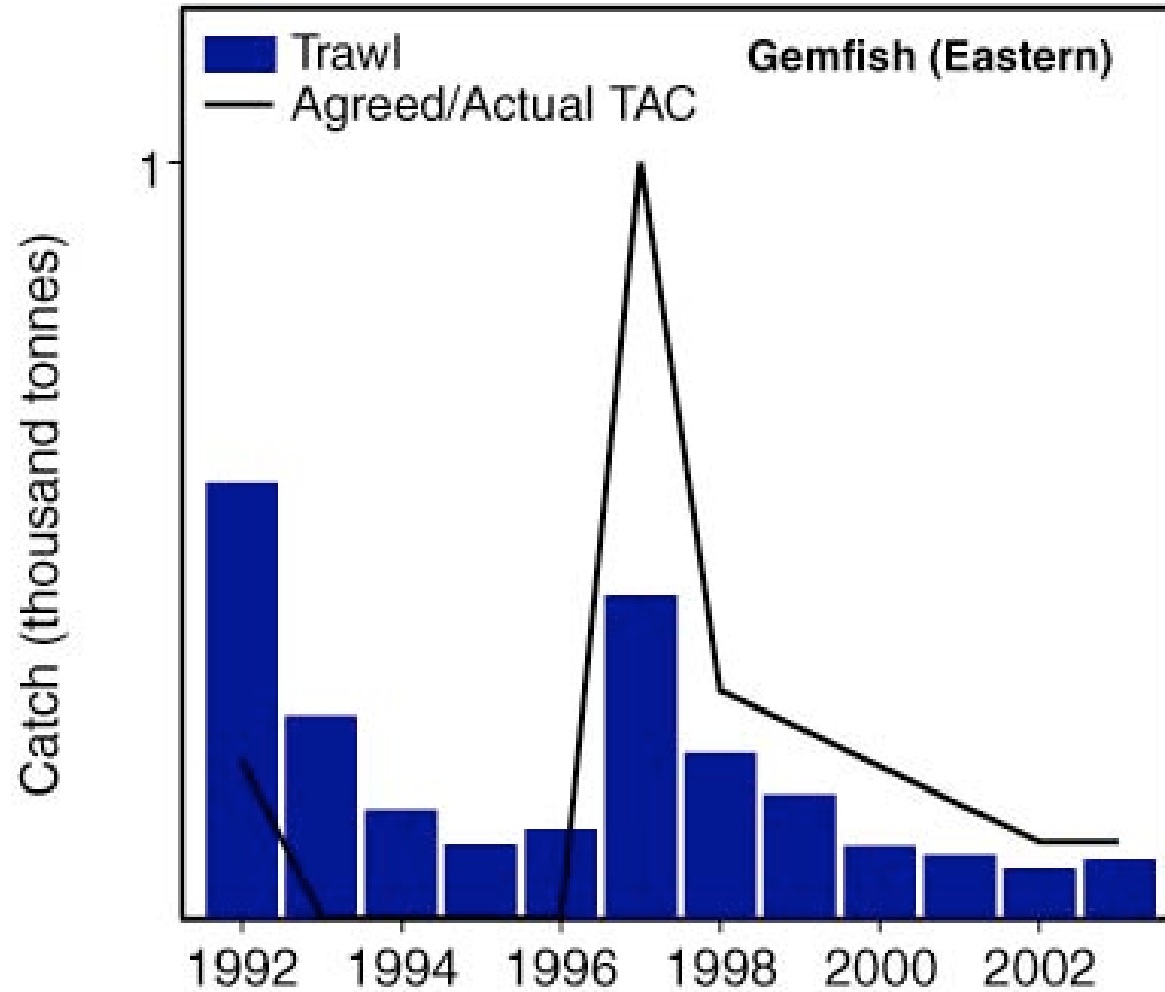
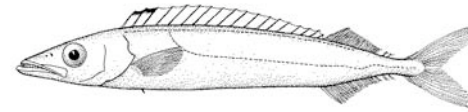
Tiger flathead (SEF)



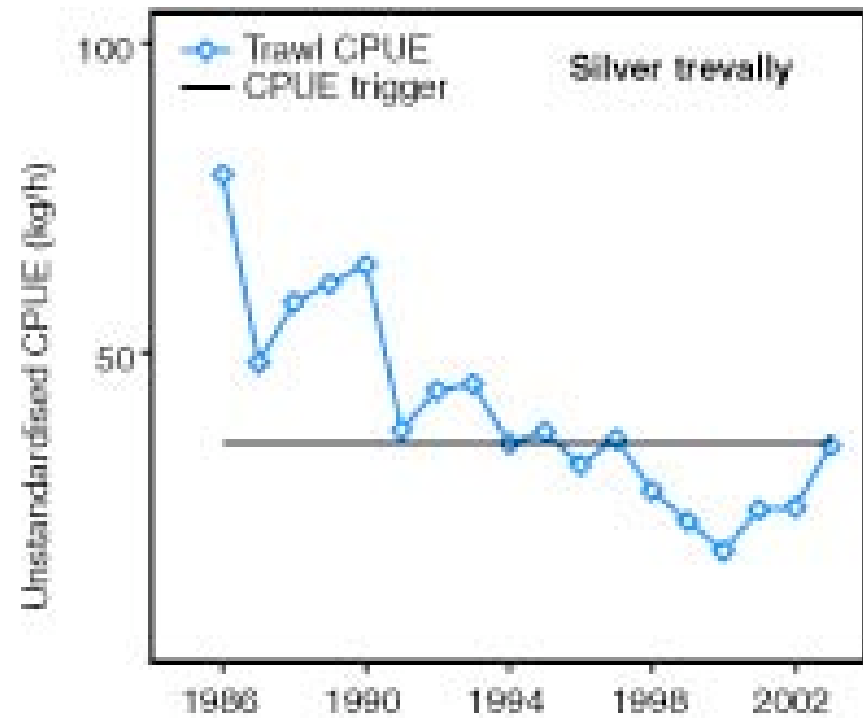
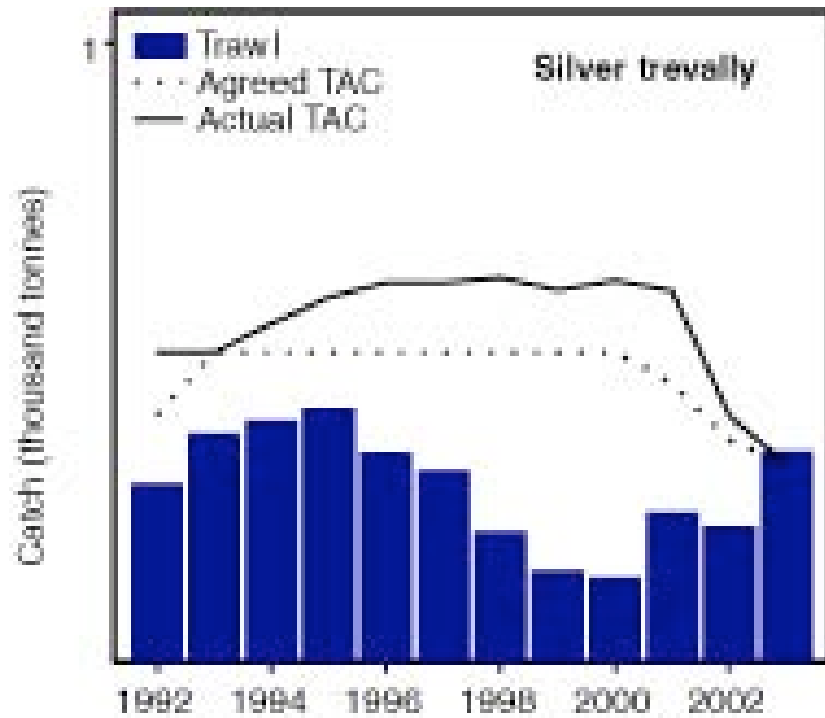
Blue grenadier (SEF)



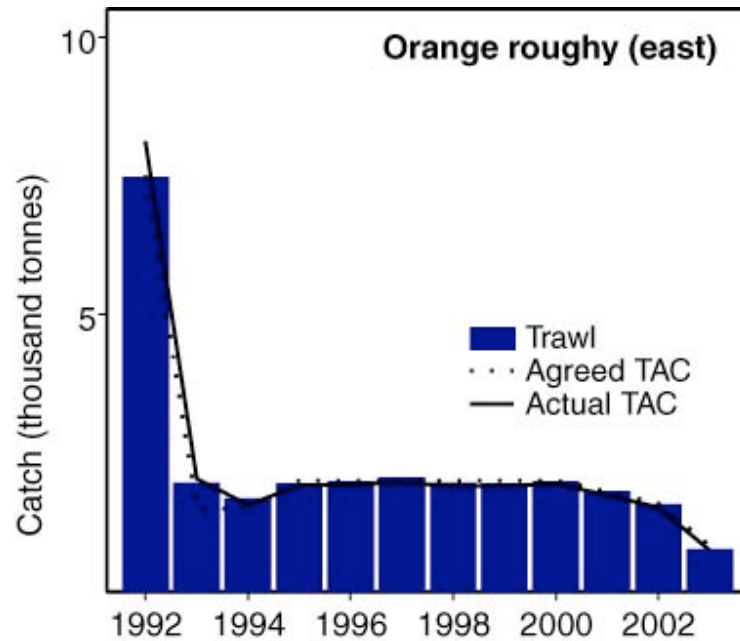
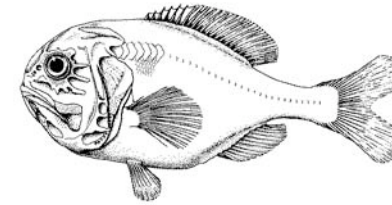
Eastern gemfish (SEF)



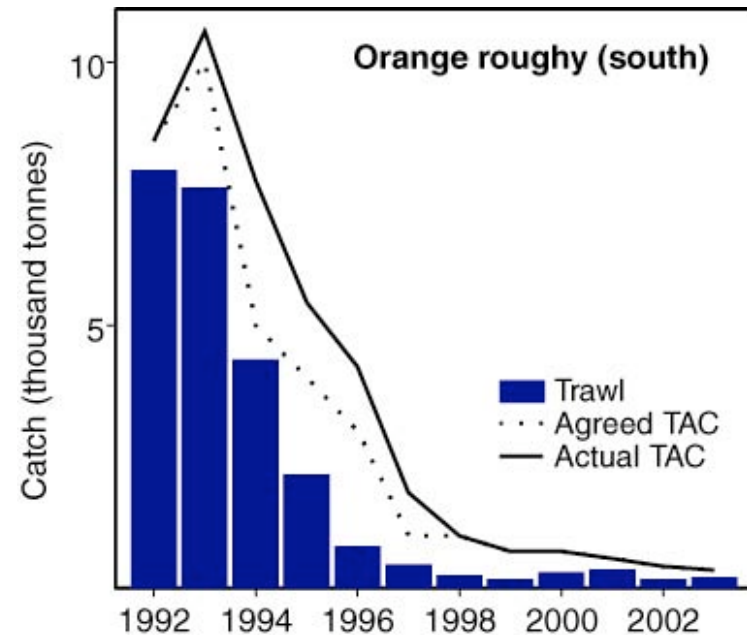
Silver trevally (SEF)



Orange roughy (SEF)

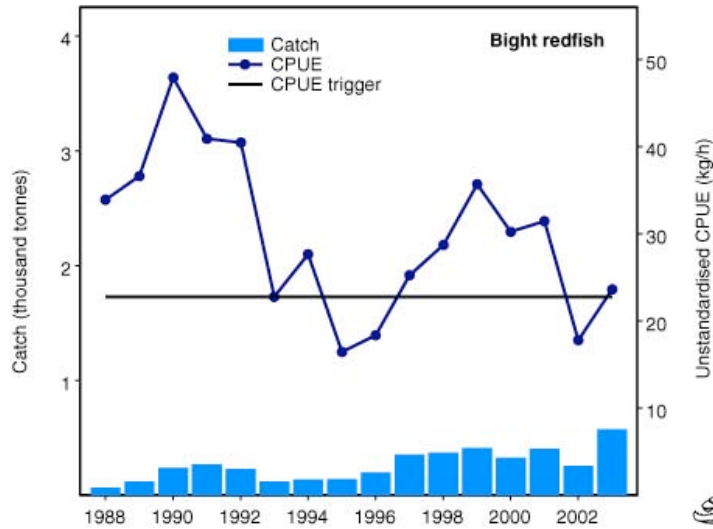


- Southern, eastern and western stocks well below limit reference points
- Stocks will be very slow to recover

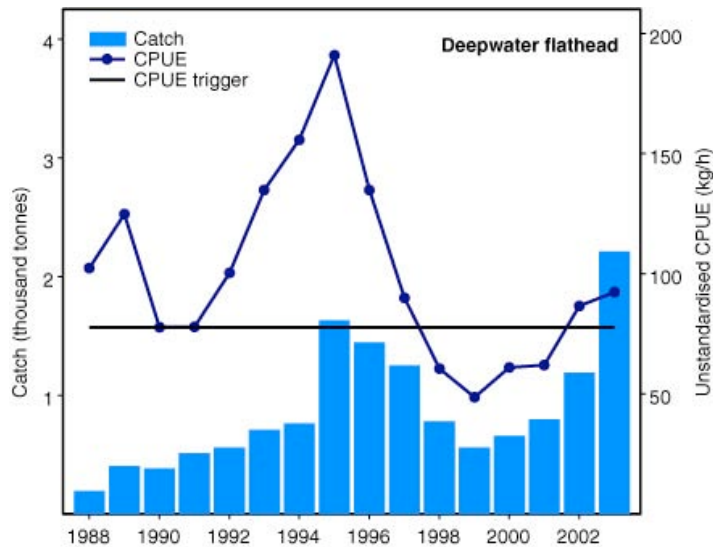
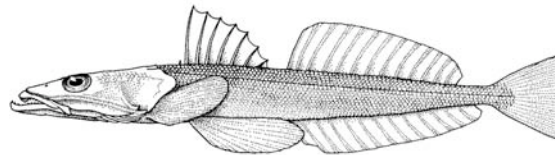


What needs to be done?

- **Don't let stocks become overfished**
- **Reduce fishing capacity**
- **Further quota reductions**
- **Consider spatial management**



Great Australian Bight trawl



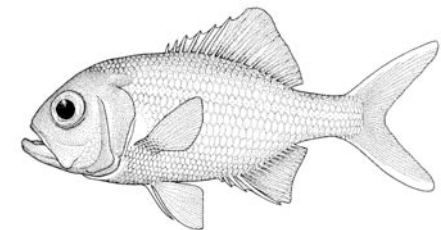
2005 trigger limits

Deepwater flathead 3000t

Bight redfish 950t

Gemfish 3000t

Blue grenadier 3500t



T·R·U·T·H



IS STRANGER THAN FISHIN'

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