ORIGINAL : ENGLISH

SOUTH PACIFIC COMMISSION

SEVENTEENTH REGIONAL TECHNICAL MEETING ON FISHERIES

(Noumea, New Caledonia, 5-9 August 1985)

Fish Aggregation Devices in New Zealand Waters

By Kevin Bailey
Fisheries Research Division
P O Box 297
Wellington, N.Z.

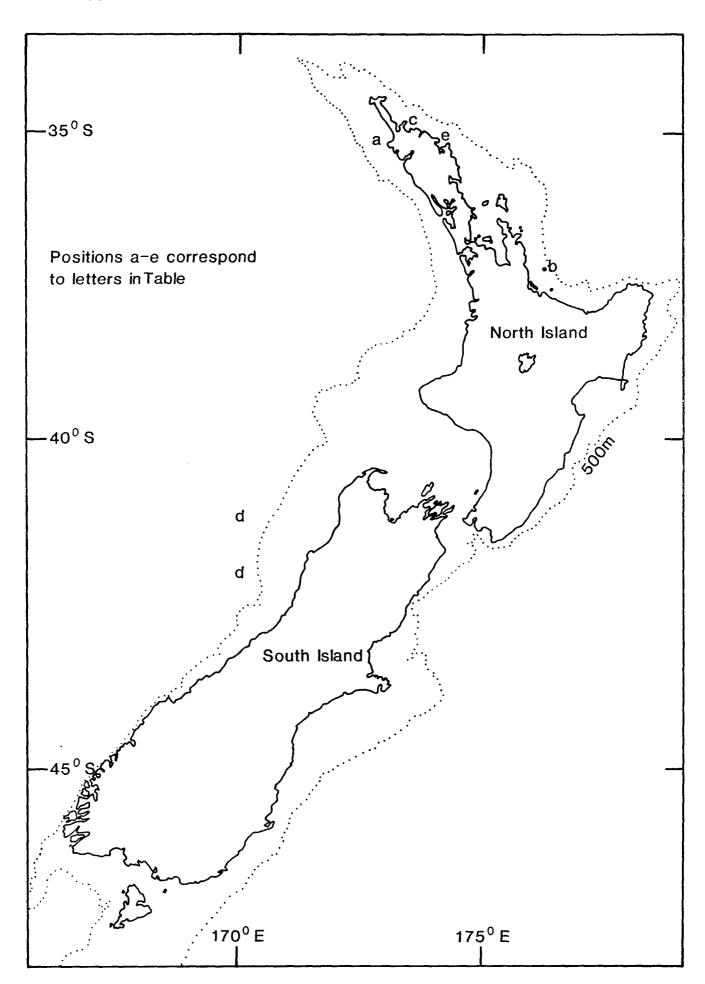
Since early 1982 a total of 13 fish aggregation devices have been deployed in New Zealand waters, with three in 1982, one in 1983 and nine in 1984. The enclosed table and figure describe the various FADs in use. Unfortunately the information is rather limited because almost all the FADs have been launched by private companies or concerns. The New Zealand Fishing Industry Board, a statutory body jointly funded by the fishing industry and government, has deployed one FAD with plans for a second well advanced and has also been involved in the Bay of Islands Swordfish Club effort.

The three earliest FADs were lost in rough weather, with one being later recovered but not relaunched. The remaining ten devices are presently in place and have on a number of occasions successfully aggregated fish. One of the Solander Fisheries buoys, deployed over a year ago, has only recently come into production with southern bluefin tuna (Thunnus maccoyi) being caught around it in June 1985. The Solander buoys were deployed in 1984 when fishermen on the west coast of the South Island (WCSI) noticed southern bluefin aggregating under an oil rig situated off the coast.

The seven drum-FADs anchored across the entrance of the Bay of Islands on the northeast coast of the North Island (NECNI) by the local big game fishing club have attracted kingfish (Seriola grandis) and dolphinfish (Coryphaena hippurus). At present no tuna or marlin have been observed around these FADs. However, the

presence of a number of pilotfish (<u>Naucrates ductor</u>) under one drum does suggest that large predators such as sharks, marlin or tuna may pass close by.

Approximate positions of FADs in New Zealand waters since 1982.





UPDATE TO TABLE: The status of FAD deployment in New Zealand waters. SPC Seventeenth Regional Technical Meeting on Fisheries, 5-9 August 1985.

ORGANISATION	NELSON FISHERIES	SANFORD (TAURANGA)	N.Z. FISHING INDUSTRY BOARD	SOLANDER FISHERIES	BAY OF ISLANDS SWORDFISH CLUB	WHANGAROA BIG GAME FISHING CLUB
Date deployed	Jan. 1982	Jan. 1982	Oct. 1983	Jun. 1984	Dec. 1984-Jan 1985	J an-Feb. 1985
Number	2	1	1	3	5	2*
Locality	Off Reef Pt. NWCNI	Bay of Plenty	Doubtless Bay NECNI	WCSI	Bay of Islands, NECNI	Off Whangaroa Hbr., NECNI
Туре	Bamboo raft	Aluminium catamaran	Polyethylene catamaran and bamboo raft	Spherical buoy	Plastic, foam filled single or double drum	Polyethylene catamaran; Single plastic drum
Underwater structures	unknown	netting, streamers	netting	netting	netting, streamers	netting, streamers
Mooring	unknown	16 mm polyprop. rope, 13 mm chain, 48 kg anchor	superfilm rope, chain, 2 t concrete filled tyre	unknown	16 mm chain, 20 mm polyprop. rope, 250 kg concretefilled tyre	16 mm chain, 20 mm polyprop. rope, 250 kg concrete-filled tyre.
Depth	unknown	100-200 m	100 m approx.	100-500+m	100-235 m	55, 65 m
Target species	Skipjack	Skipjack	Tuna	Southern blue- fin tuna	Tuna, marlin	tuna, marlin
Species aggregated	unknown	Kingfish	Unknown	Southern bluefin	Kingfish, dolphinfish	unknown
Fate	lost in storm soon after set	lost in storm after 1 month, retrieved	lost 6 weeks after deployment possibly trawled	-	4 in place, l lost after l month, possibly vandalised	sunk by boat after 1 month

 $[\]star$ with a third to be deployed.

to be added to: Fish Aggregation Devices in New Zealand waters by Kevin Bailey, FRD, Wellington, N.Z.