

FISHERIES — JUVENILE FISH PROGRAM — FINE MESH BEACH SEINE NETS

1094. Hon LYNN MacLAREN to the Minister for Fisheries:

I refer to the Department of Fisheries program of using fine mesh beach seine nets to sample juvenile fish at various WA coastal locations.

- (1) Since which year has this program been running?
- (2) Will the minister list all locations where sampling regularly occurs?
- (3) What is the purpose of this program?
- (4) Which site or sites has yielded the greatest diversity of juvenile fish species in recent years?
- (5) In relation to (4), what are the species that have been caught at this site?

Hon KEN BASTON replied:

I thank the honourable member for some notice of the question.

- (1) The Department of Fisheries started using fine mesh beach seines to survey small fish in 1993 and an annual monitoring program using this method commenced in 1995. The choice of sites being sampled has varied over the years. Not all sites have been sampled since 1993 or 1995.
- (2) Since 1993, there have been 52 sites sampled. Some of these sites have only been sampled once or twice. Currently, the department regularly samples at six sites. These sites are: Pinnaroo Point in Perth, near Hillarys; Mangles Bay, Perth; Warnbro Sound in Perth, near Point Kennedy; Koombana Bay and Leschenault Inlet in Bunbury; and Poison Creek in Cape Arid National Park, east of Esperance.
- (3) The program provides data for stock assessments and for other fishery management purposes. Specifically, it monitors the strength of annual juvenile recruitment and provides biological data for numerous fish species. Also, since the program has now been running for about 25 years, the data is providing insights into long-term trends in fish communities. For example, the data is helping the department to understand how gradual ocean warming around the south west of Western Australia is affecting local fish stocks and fisheries.
- (4) In the past 10 years, fish diversity—when defined as the number of species or families recorded—has been similar at Mangles Bay with 74 species, Koombana Bay with 74 and Warnbro Sound with 73.
- (5) Refer to the table.

I seek leave to table the tabular response and have it incorporated into *Hansard*.

Leave granted. [See paper 3461.]

The following material was incorporated —

TABLE 1. Number of individuals of each fish species or family recorded at each site.

Species or family	Koombana Bay	Mangles Bay	Warnbro Sound
<i>Acanthaluteres vittiger</i>	1	3	
<i>Acanthopagrus butcheri</i>			1
<i>Aldrichetta forsteri</i>	3463	1128	733
<i>Ammotretis elongatus</i>	279	34	21
<i>Anoplocapros amygdaloides</i>	4		
<i>Apogon rueppellii</i>	27	1608	244
<i>Aptychotrema vincentiana</i>	3		14
<i>Aracana aurita</i>	10		6
<i>Arenigobius bifrenatus</i>		38	
<i>Arripis georgianus</i>	659	31	91
<i>Arripis truttaceus</i>	254	86	13
<i>Ashtoret lunaris</i>	3		2
Atherinidae	1061	1630	815
<i>Atherinomorus ogilbyi</i>	1507	1556	1236
<i>Atherinosoma elongata</i>	96	123	1

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Blenniidae		1	
Bothidae		4	
Brachaluteres jacksonianus	1	4	
Callionymus goodladi		5	32
Chaetodermis penicilligerus	2	3	1
Cheilodactylus rubrolabiatus			1
Cnidoglanis macrocephalus	36	24	37
Contusus brevicaudatus	450	62	32
Craterocephalus mugiloides	277	169	
Cristiceps aurantiacus		2	3
Cristiceps australis	5	12	5
Dactylopus dactylopus		11	10
Dasyatididae	3		
Diodon nicthemerus	1		
Elops hawaiiensis			3
Engraulis australis	7	12	
Enoplosus armatus	78	12	1
Favonigobius lateralis	36	2798	
Fistularia commersonii		1	
Gerres subfasciatus	338	907	551
Gobiidae	4	703	
Gonorynchus greyi	2		
Gymnapistes marmoratus	19	233	20
Halletta semifasciata	60	73	53
Hyperlophus vittatus	1694	293	452
Hyporhamphus melanochir	178	79	108
Iso rhotophilus			1
Leptatherina presbyteroides	524	839	82
Leptatherina wallacei	10	45	
Leptoichthys fistularius			1
Lesueurina platycephala	440	601	293
Leviprora laevigatus		1	
Leviprora inops	1		1
Microcanthus strigatus	1	14	
Monacanthidae	31	133	67
Monacanthus chinensis		9	
Mugil cephalus	102	1425	38
Mullidae	1	18	1
Neoodax balteatus	1	6	
Odacidae	51	17	24
Pagrus auratus	1		
Paraplagusia unicolor	11		2
Parupeneus chryserpleuron			1
Pelates octolineatus	25	1026	121
Pelates sexlineatus	43	941	181
Pelsartia humeralis	1	21	35

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Pentapodus vitta		59	100
Platycephalidae	5	2	2
Platycephalus endrachtensis	1	3	1
Platycephalus speculator	30		37
Polyspina piosae	1		
Pomatomus saltatrix	212	1	6
Pseudocaranx dentex	214	15	38
Pseudocaranx wrighti	1		6
Pseudorhombus jenynsii	11	165	20
Rhabdosargus sarba	320	967	167
Scobinichthys granulatus	10	15	7
Scomber australasicus	2		
Scorpius georgianus			2
Siganus fuscescens		62	
Sillaginidae	35	175	366
Sillaginodes punctata	234	1248	18
Sillago bassensis	2973	223	919
Sillago burrus	98	5184	16
Sillago ingenuua			1
Sillago schomburgkii	429	1529	609
Sillago sp.	61	70	282
Sillago vittata	210	485	771
Siphamia cephalotes	7	3	2
Siphonognathus radiatus		2	
Sphyraena novaehollandiae			4
Sphyraena obtusata		4	
Spratelloides robustus	185	66	3302
Squatina australis	43		
Stigmatopora argus	8	1	4
Strongylura leiura			5
Syngnathidae	15	30	6
Teraponidae		20	
Tetraodontidae			1
Tetrosomus reipublicae		1	
Torquigener pleurogramma	434	2263	1025
Trachurus novaezelandiae	9		1
Trygonorhina fasciata		4	1
Unknown Species		2	6
Upeneichthys vlamingii		1	2
Upeneus asymmetricus	2		
Upeneus tragula	3	7	
Urolophidae	3		1
Total no. of fish	17267	29348	13062