# FRANKLIN

## National Facility Oceanographic Research Vessel

Spawning and Larval Recruitment Processes of Commercially Important Species in Coastal Waters off Victoria – July 1998 (Winter 2) Cruise

### **CRUISE SUMMARY**

### **ORV FRANKLIN**

### FR 09/98

Depart Melbourne Arrive Portland Tuesday 21 July 1998 Wednesday 29 July 1998

### **Principal Investigator**

Dr Francisco J. Neira Marine and Freshwater Resources Institute Queenscliff Victoria

For Further information contact:

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### SUMMARY O.R.V. FRANKLIN CRUISE Fr 09/98 - JULY 1998

### **Itinerary**

1000hrs, 21 July 1998 Depart: Melbourne Arrive: Portland

1000hrs, 29 July 1998

### **Principal Investigator**

Dr Francisco J. Neira Marine and Freshwater Resources Institute PO Box 114, Queenscliff, VIC 3225

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Project: Spawning and larval recruitment processes of commercially important species in coastal waters off Victoria - July 1998 (Winter 2) Cruise.

### 1. Sampling area

The area sampled during the July 1998 Franklin cruise comprised the Victorian and South Australian coasts between Gabo Island (149°55'E; 37°36.0'S) and Port MacDonnell (140°17'E; 38°19.0'S), south to 32 nautical miles (nm) offshore.

### 2. Cruise track

The July 1998 ichthyoplankton survey covered 31 stations along seven parallel transects located 65 nm apart, each containing five sampling stations located at 2, 4, 8, 16 and 32 nm offshore (see enclosed summary table). Franklin departed Williamstown (Melbourne) on July 21 at 10.00 hrs and sampling commenced the same day at the inshore-most station (2 nm) off Port Phillip Heads at 15:00 hrs. Another two stations (4 and 8 nm offshore) were completed along this transect before heading east to the Cape Liptrap transect (July 22). Sampling continued east along the Cape Conran transect (July 23) and Gabo Island transect (July 24), before steaming west to complete the remaining two stations (16 and 32 nm) along the Port Phillip Heads transect (July 25-26). Sampling was subsequently carried out along the Port Campbell transect (July 26) and at one station

### 4. Data and samples obtained

A total of 28 CTD profiles (sigma-t, temperature, dissolved oxygen, fluorescence), and 95 water samples for nutrient analysis were collected with the CTD rosette throughout the cruise. Ichthyoplankton samples totalled 162 which included 81 EZ net samples, 5 bongo oblique tows in the stratum 25-0 m, and 76 bongo neuston samples, the latter including 26 additional samples collected during night time between transects, and 11 extra surface tows within Portland Bay.

### **Personnel**

### MAFRI (Vic):

Dr Francisco J. Neira - Chief Scientist (Principal Investigator) - Ichthyoplankton

Mr Paul Hamer - Marine Scientist

Mrs Sharon Tait - Technical Officer - Ichthyoplankton sampling

Mr David Beyer - Technical Officer - Ichthyoplankton sampling

Mr Andy Longmore - Marine Scientist - Chemistry

Mr Martin Lourey - Marine Scientist - Chemistry

### CSIRO (Hobart):

Mr David Terhell - ORV Franklin Cruise Manager / Computer Systems

Mr Alan Poole - EZ technician - Electronics

Ms Kylie Brown - Electronics

Mr Ron Plaschke - Chemistry

### ORV Franklin:

Ian Taylor Master

Arthur Staron Chief Officer

Allan MacCarthy Mate

John Morton Chief Engineer
Greg Pearce First Engineeg

Andrew McLagan Electrical Engineer

Jannick Hansen Bosun Greg Simpson AB

Wayne Browning AB
Peter Genge AB

Les Clark Greaser

Ron Culliney Chief Stewart
Gary Hall Chief Cook
Tom Condon 2nd Cook

# O.R.V. FRANKLIN CRUISE 9/98 - JULY 1998

Transects and station positions, and No of samples

3	avro i cimpi ca rowe.								
125	4	20	24	19	17	17	24	Total samples	
31	4	3	5	5	4	5,	5	Subtotal samples	
23	3	2	4	3	3	4	4	EZ samples	
								Bongo 25-0 m	
00	,		_	2	_			Neuston samples	32
	1470	1760	84	80	80	361	150	Max depth (m)	
	38° 19.0'	38° 57.0'	39° 11.0′	38° 49.0′	39° 15.5′	38° 20.5'	38° 06.0'	Latitude	
26	0	4	5	5	4	4	4	Subtotal samples	
18		3	4	3	3	ω	2	EZ samples	
_							-	Bongo 25-0 m	
7		-		2	-	-		Neuston samples	16
-	120	135	84	75	76	60	100	Max depth (m)	
	38° 03.0'	38° 41.0′	38° 55.0'	38° 33.0'	38° 58.5'	38° 04.5'	37° 50.0′	Latitude	#1 1
26	0	5	5	4	4	3	5	Subtotal samples	
18		3	. 3	3	3	2	4	EZ samples	
								Bongo 25-0 m	
<b>&amp;</b>		2	2		_	_	_	Neuston sámples	∞
	50	75	67	ස	67	. 54	120	Max depth (m)	
	37° 55.0′	38° 33.0'	38° 47.0'	38° 25.0'	38° 50.5'	0.5.95 aLE	37° 42.0′	Latitude	,
23	0	4	5	3	3	3	5	Subtotal samples	
14		2	3	2	2	2	3	EZ samples	
_							-	Bongo 25-0 m	
8		2	2	_	_	<b>,</b> —1	paral .	Neuston samples	4
	26	57	64	48	42	40	120	Max depth (m)	
	37° 51.0′	38° 29.0′	38° 43.0'	38° 21.0′	38° 46.5'	37° 52.5'	37° 38.0′	Latitude	
19	0	4	4	2	2	2	5	Subtotal samples	
8		2	2				4	EZ samples	
3				_		-		Bongo 25-0 m	
8		2	2	_	_	ب	-	Neuston samples	2
	22	52	50	30	16	29	100	Max depth (m)	
	37° 49.0′	38° 27.0'	38° 41.0'	38° 19.0'	38° 44,5'	37° 50.5'	37° 36.0'	Latitude	:
	140° 17′	141° 40′	143° 04'	144° 26	145° 48′	148° 33'	149° 55'	Longitude	nautical miles
Total samples	MacDonnell	Portland	Campbell	Heads	Liptrap	Conran	Island	Location	offshore
	Port		Port	P. Phillip	Cape	Cape	Gabo		Distance
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<sup>\*=</sup> EZ not employed due to bad weather

ADDITIONAL TOWS PORTLAND:

162

TOTAL SAMPLES: