



W...steenbras

Dr Paul Cowley (SAIAB)



Dr ...kob

Dr Amber Childs (Rhodes)



...ervis

Dr Taryn Murray (Rhodes/SAIAB)



Over-
exploited
...otted
grunter

Dr Tor Næsje (NINA)

So what did we know 10 years ago?

- Estuarine dependence?
- Marine-estuarine connectivity?
- Proportion of time spent in estuaries?
- Proportion of fish that go to sea?
- Whether or not species show differences?
- Whether or not behaviour differs from one estuary to another?

Acoustic telemetry methods

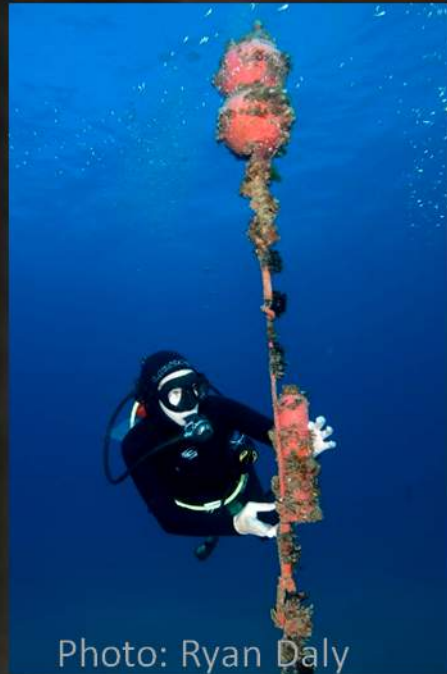


Photo: Ryan Daly

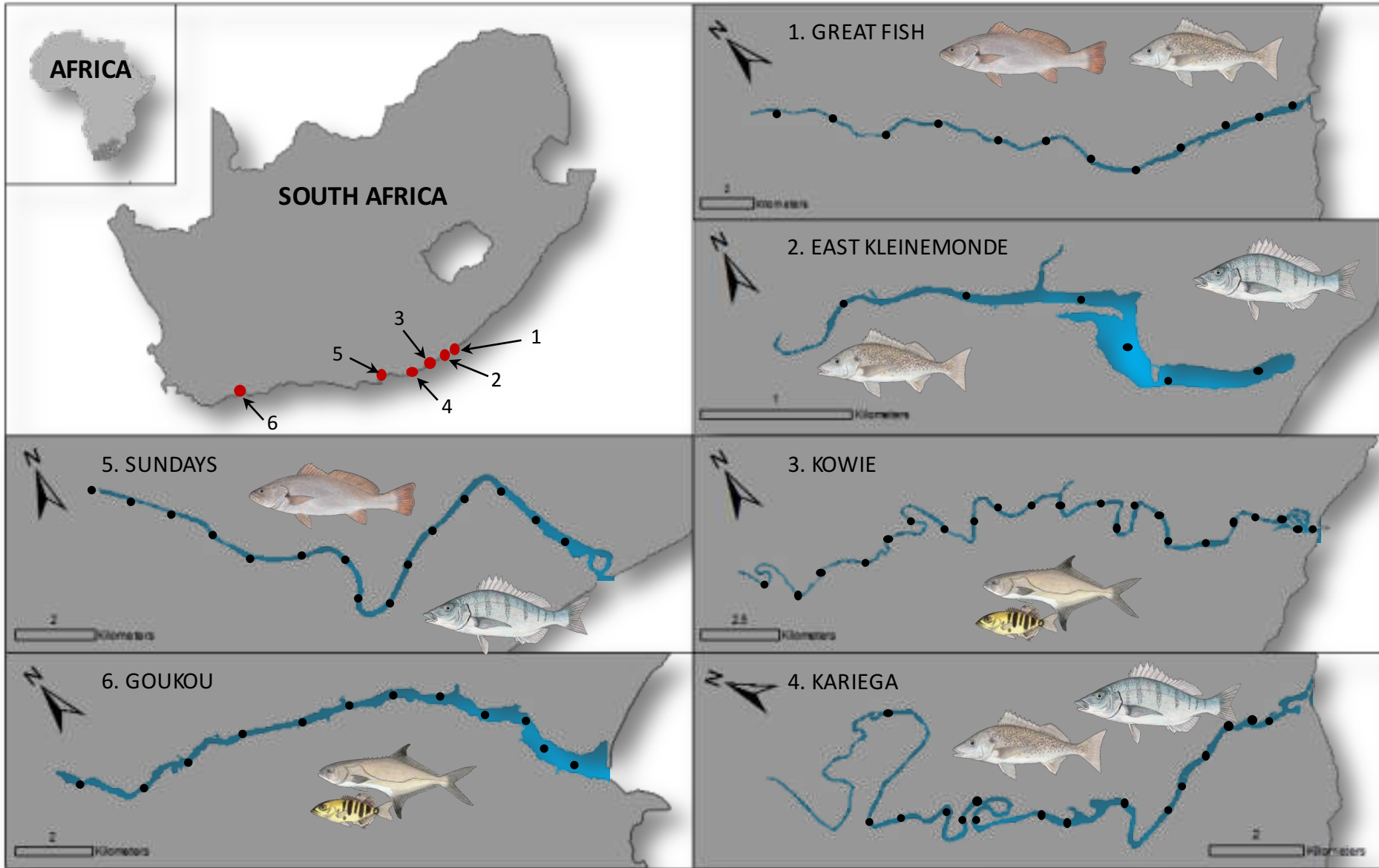


Photo: Shaun Deyssel



www.vemco.com

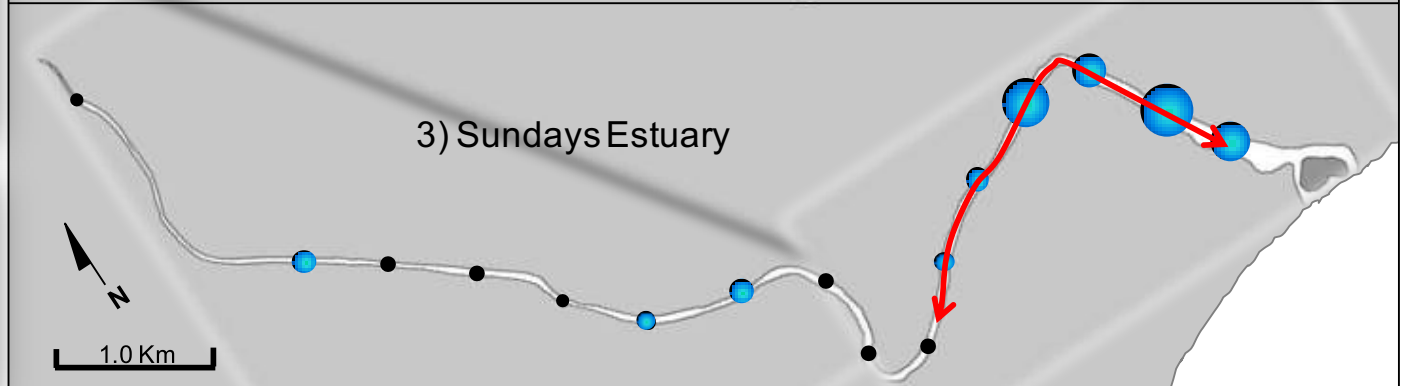
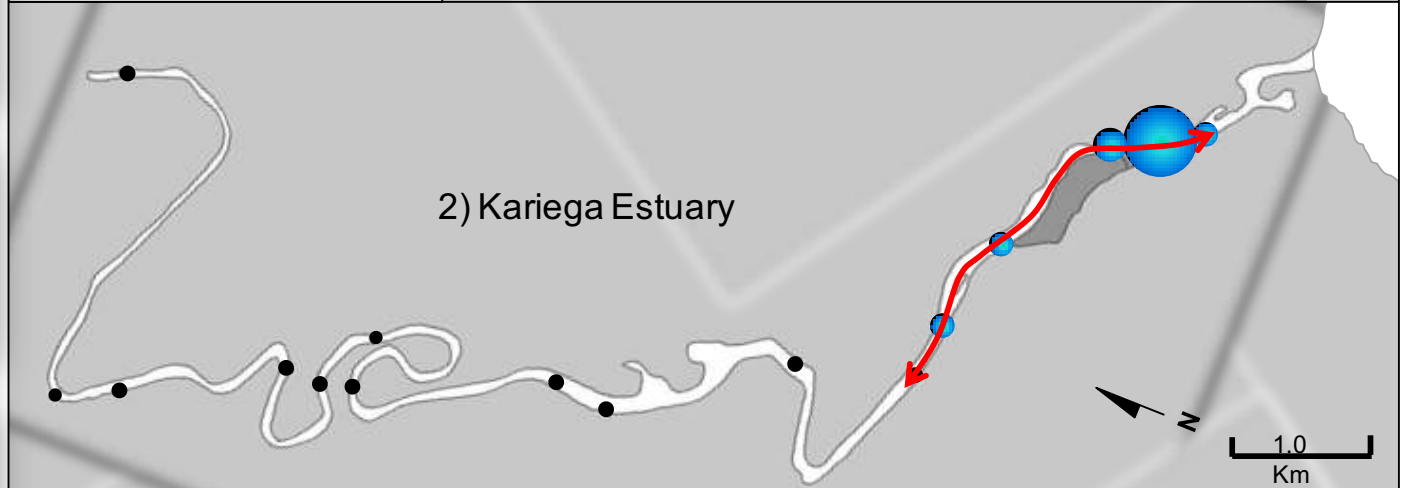
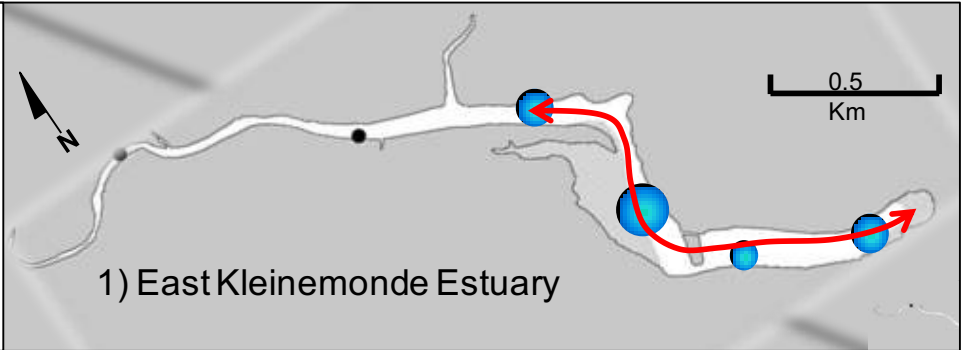
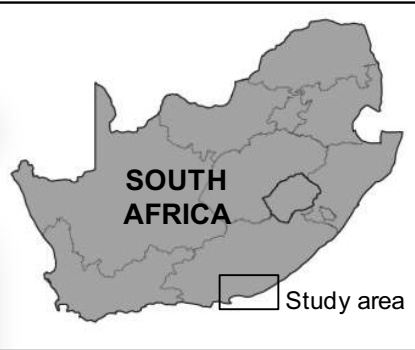
Study estuaries

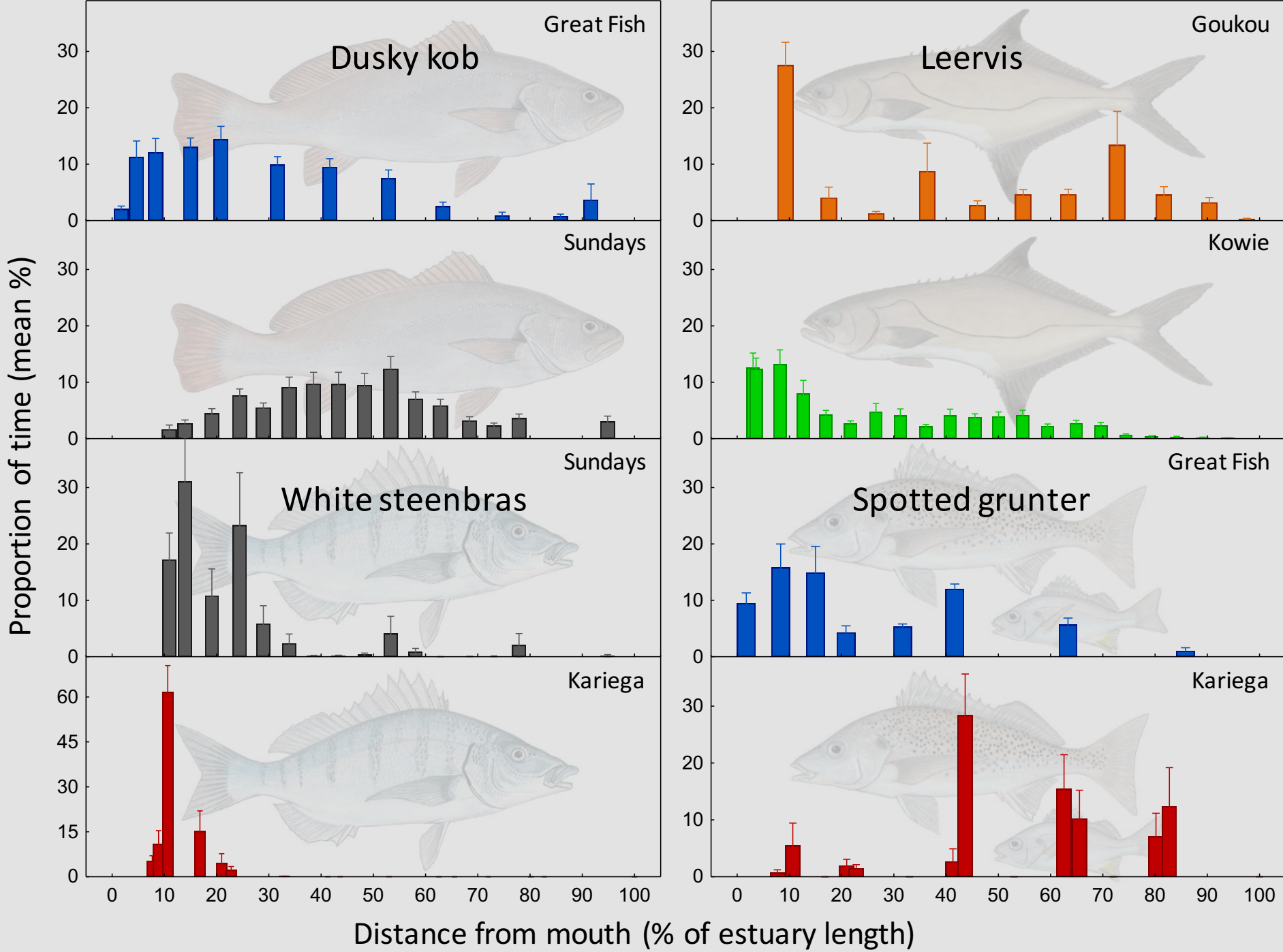


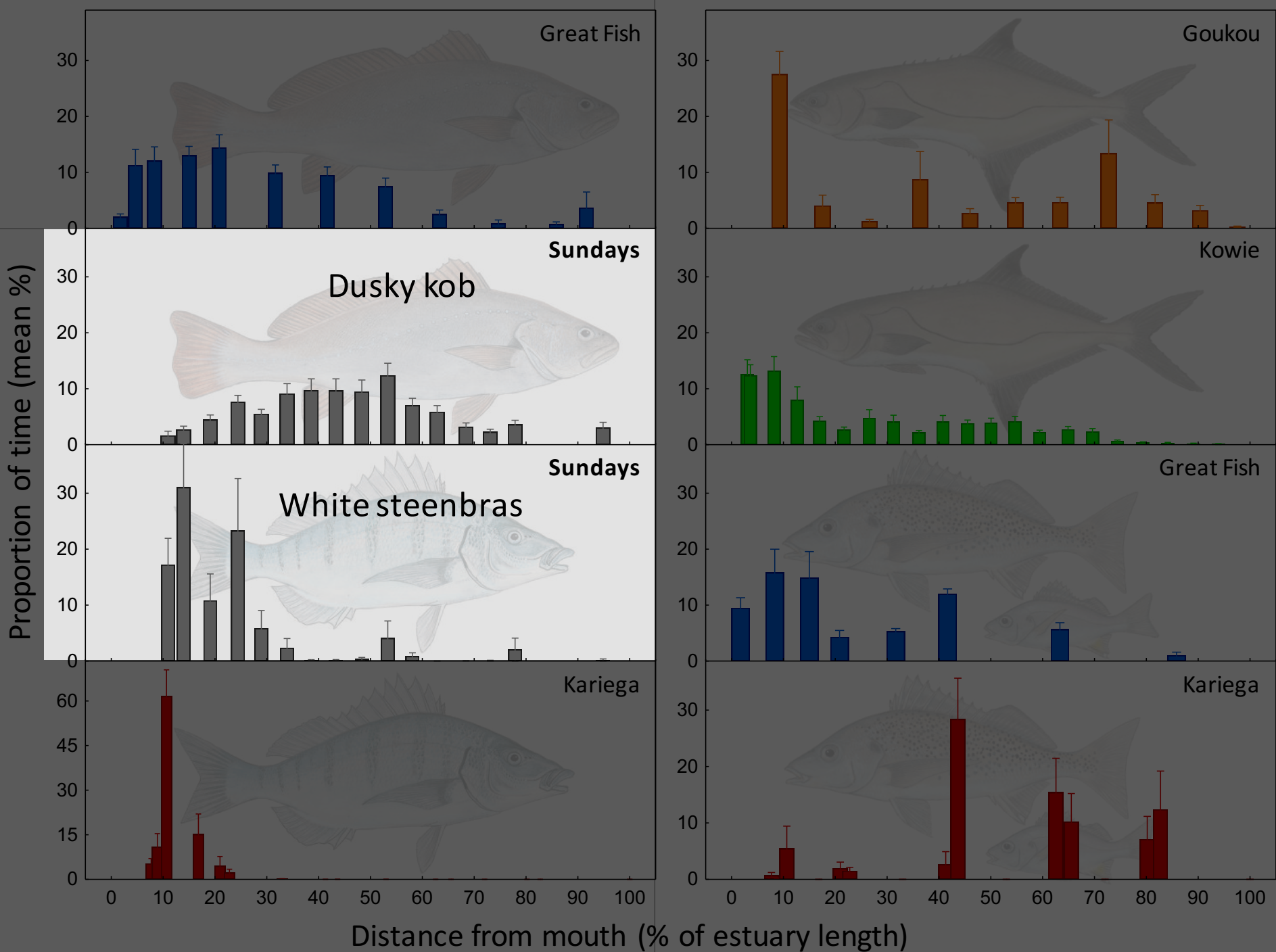
Estuarine dependence

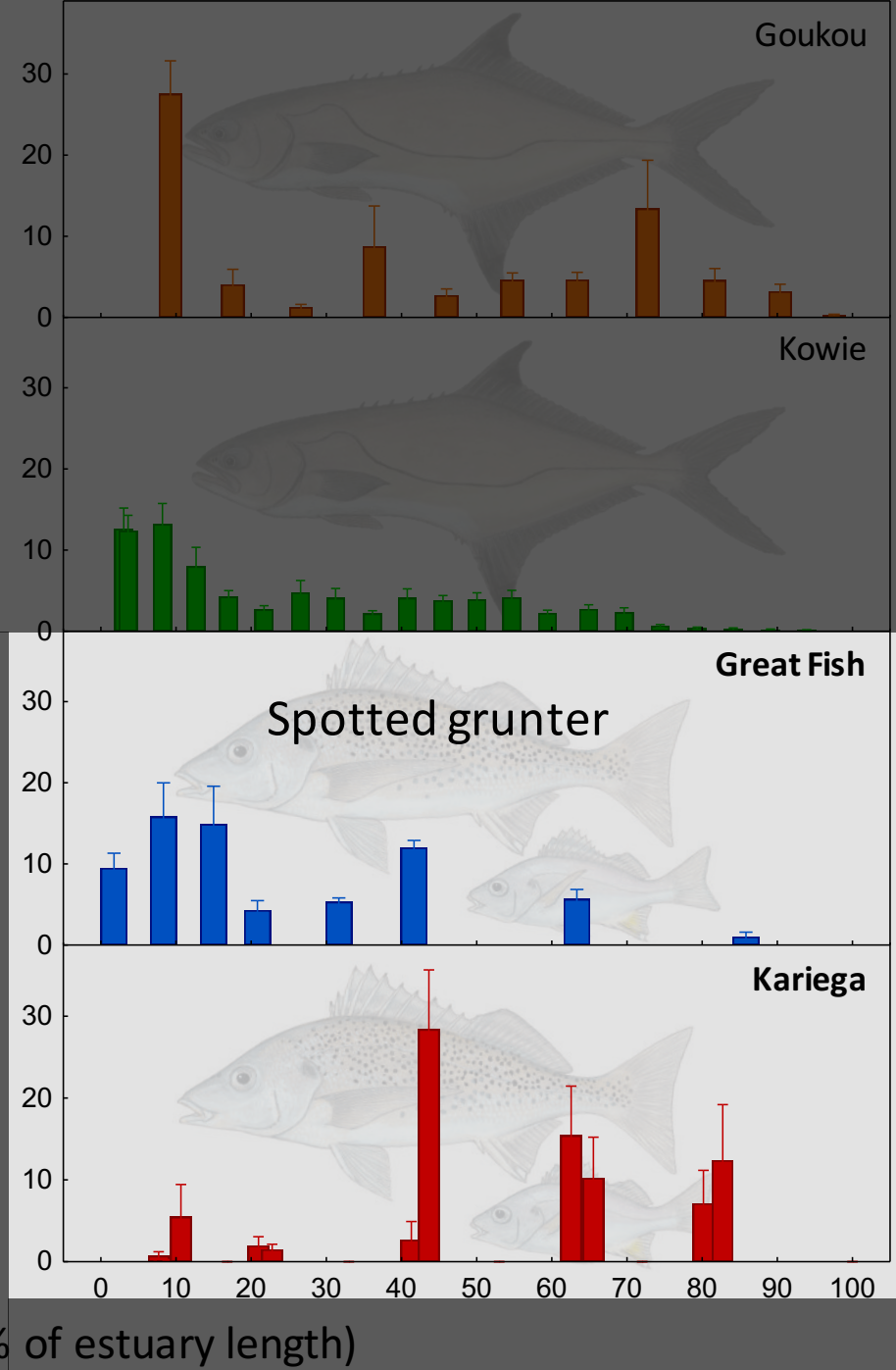
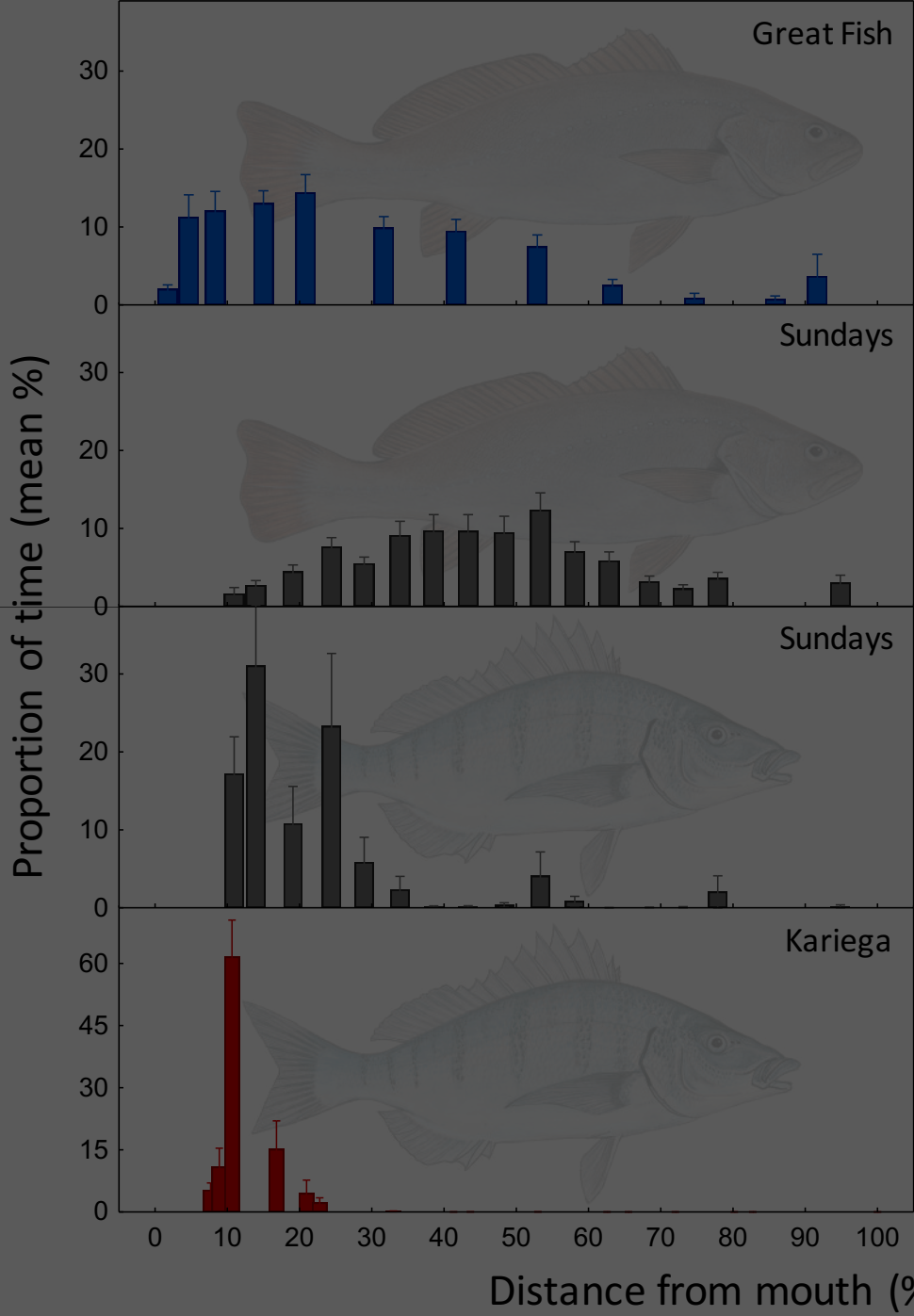
Species	Estuary	% of fish that went to sea	Mean % of time spent in estuary
Dusky kob 	Great Fish	72	87
	Sundays	40	97
Leervis 	Goukou	76	32
	Kowie	86	54
White steenbras 	Kariega	30	91
	Sundays	40	98
Spotted grunter 	Great Fish	80	69
	Kariega	56	88

Area use within estuaries

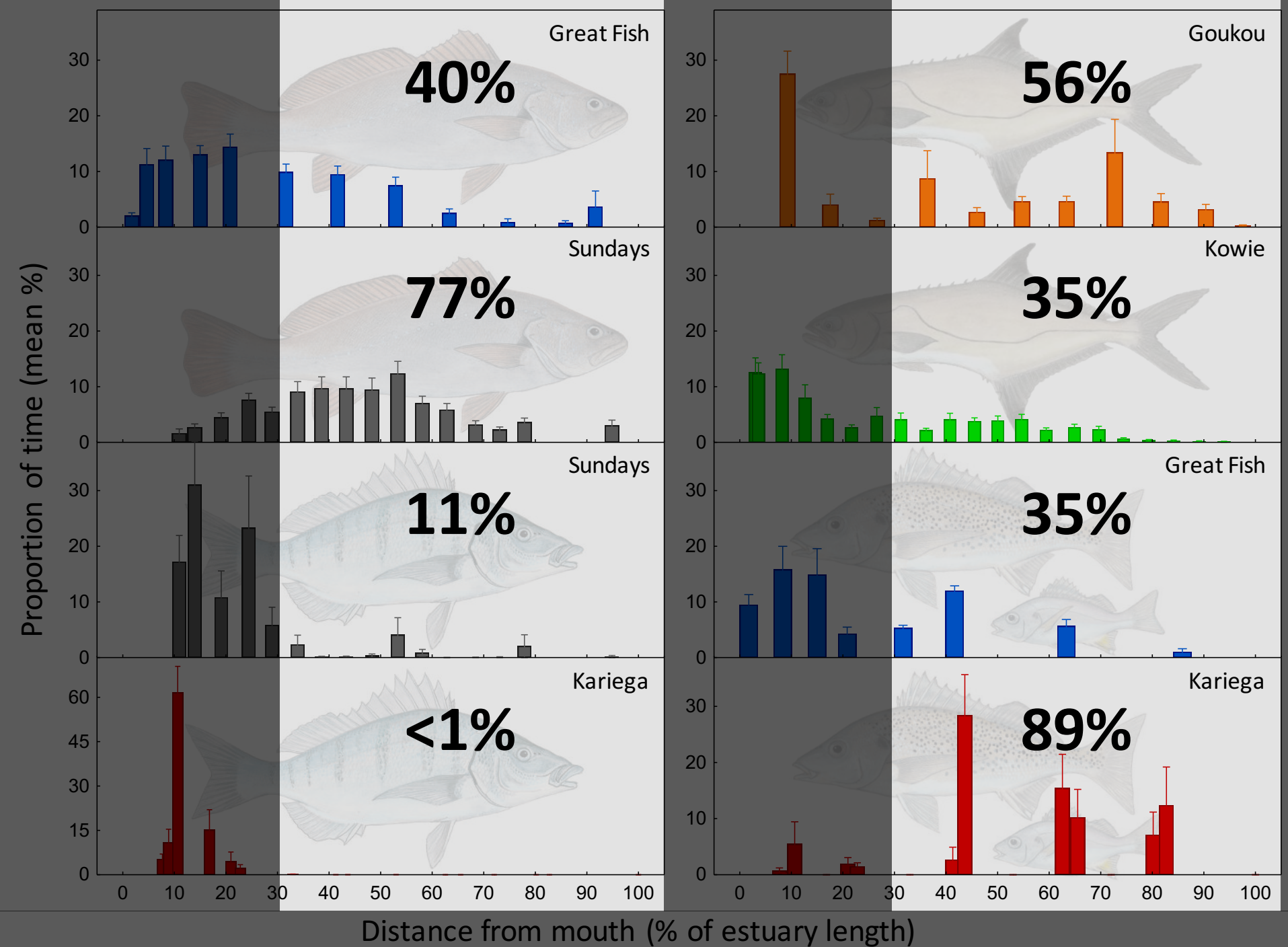


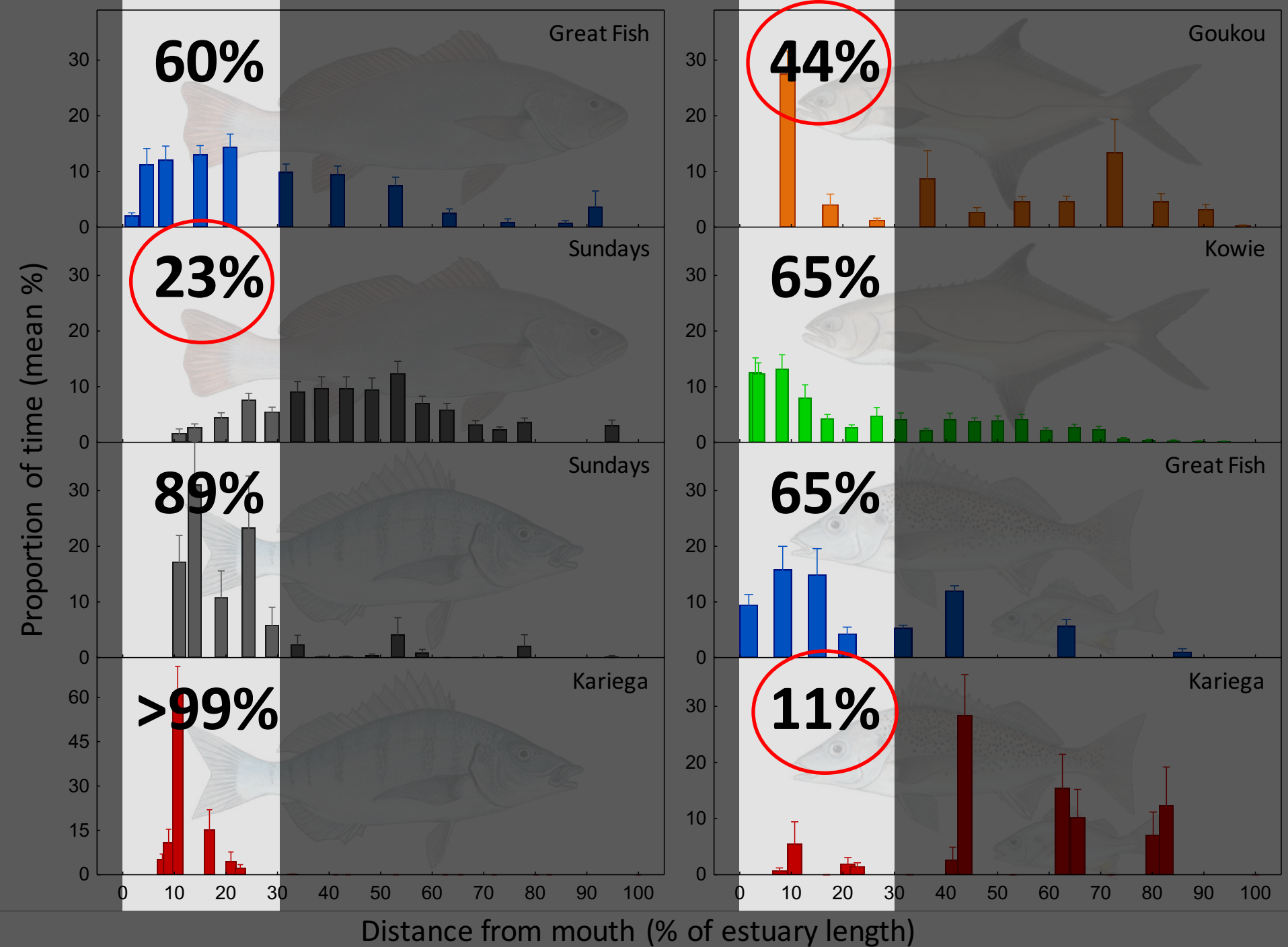






Distance from mouth (% of estuary length)



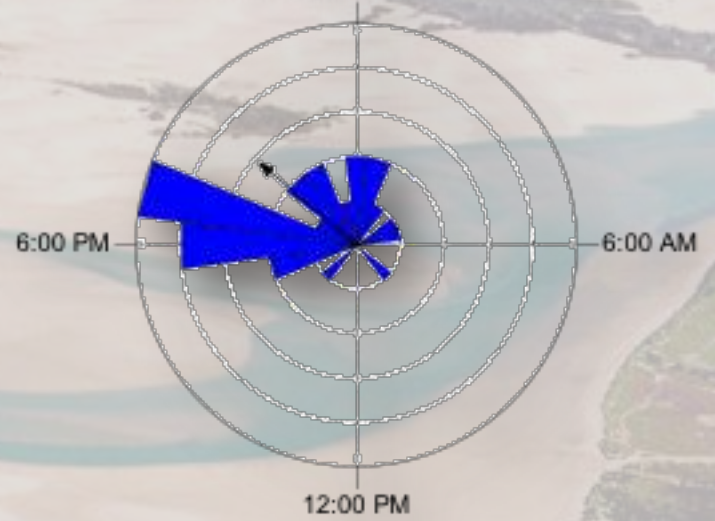


Dusky kob



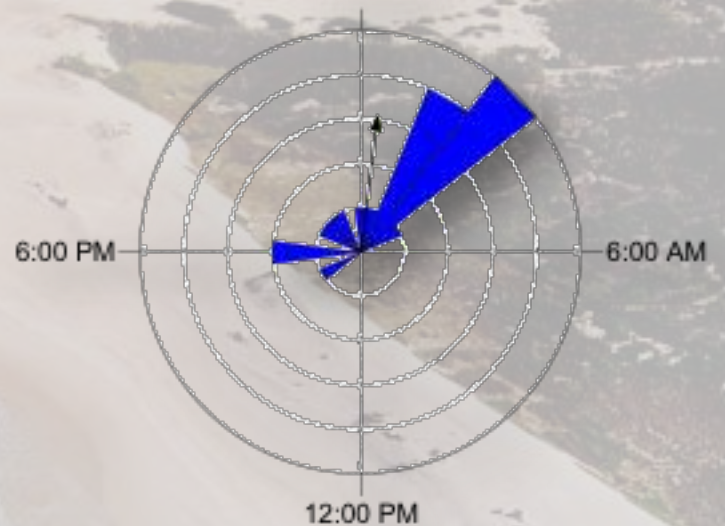
DEPARTURE

12:00 AM

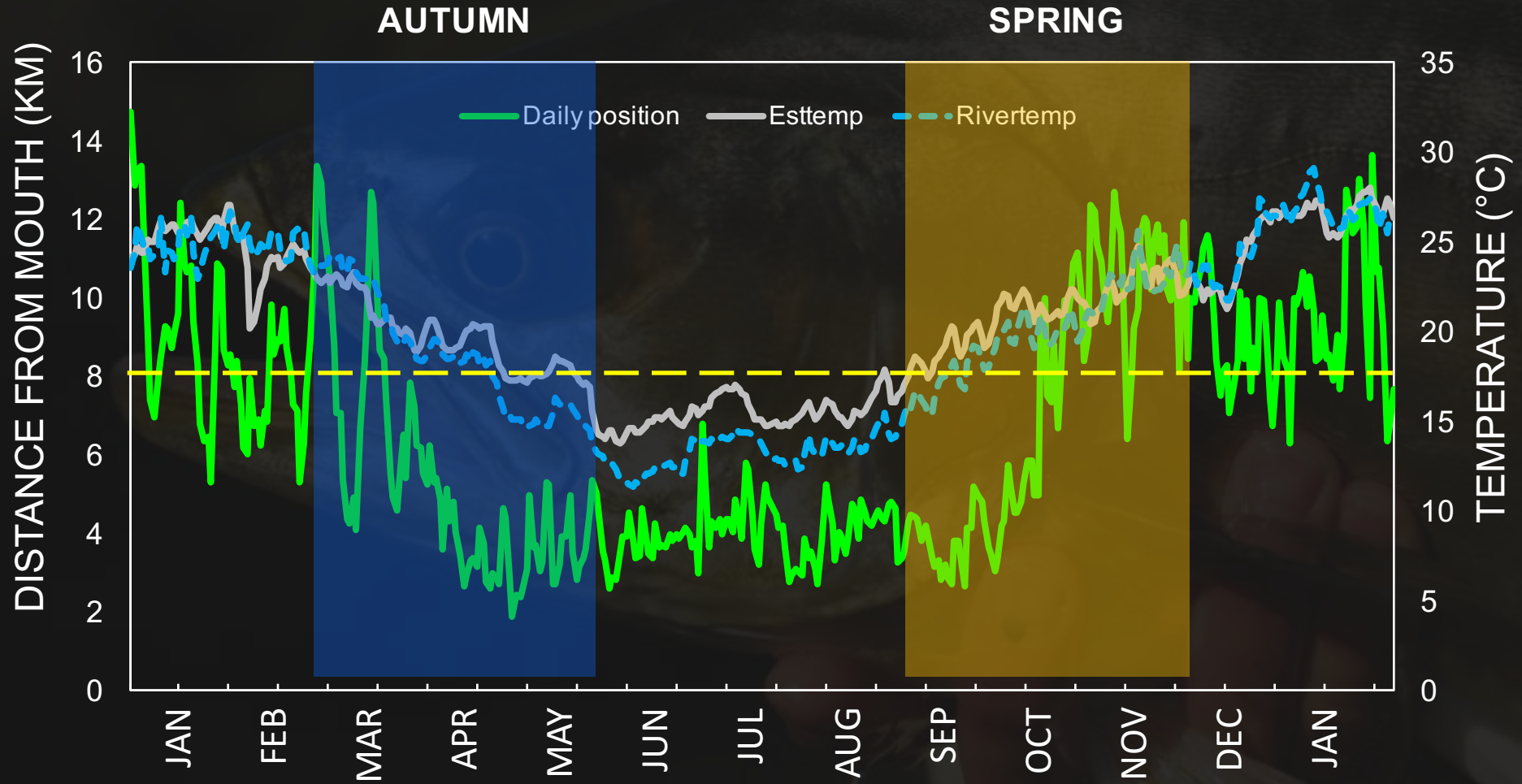


RETURN

12:00 AM



Long-term persistence - Leervis





Mortality



- Salt Fishing South Africa
Does anyone perhaps know this angler or have details on this pic as authorities would like to speak to him

So what do we know 10 years later?

- Estuarine dependence
- Marine-estuarine connectivity
- Proportions of time spent in estuaries
- Proportions of fish that go to sea
- That species do show differences
- That behaviour can differ from one estuary to another, even within a species
- High use areas for area closure
- Cyclical movement patterns of each species
- Mortality

**Fisheries
Research**

**ERIES
RESEARCH**





Thank you