**FPK pelagic planktivores**, Flying fish, sauries, redbait, mackerels

**Flying fish**: Six species specialized on copepods (58.3-96.9% by number), but targeted different families. Specifically, the barbel flyingfish Exocoetus monocirrhus (n = 205) focused on euchaetids (51.6%), the banded flyingfish Hirundichthys marginatus (n = 24) fed on pontellids (21.8%), while the tropical two-wing flyingfish Exocoetus volitans (n = 11) and the bigwing halfbeak Oxyporhamphus micropterus (n = 34) ingested calanoids (54.6 and 17.0%). In contrast, the whitetip flyingfish Cheilopogon xenopterus (n = 73) and the mirrorwing flyingfish Hirundichthys speculiger (n = 4) had generalized diets comprising similar proportions of amphipod, copepod, mollusc and larval fish prey.

**Redbait, jack mackerel**: When stomach contents were analysed by fish size (size classes I–V), a trend towards larger prey items with increasing size of fish was apparent. The IRI for krill in small redbait (RBT I) was only 4.6%, while it dominated the stomach contents of larger size classes, ranging from 59% in RBT III to 73% in RBT IV. In jack mackerel, krill was absent in the smallest available size class (JMK III) but the IRI increased to 55% in the largest fish (JMK V). Copepods occurred in all size classes of both species; however, the general trend was for decreased occurrence with increasing fish size. Gastropods, primarily pteropods, were the dominant item in the smallest size class of jack mackerel, while this group was less important in size III and IV fish. In both redbait and jack mackerel stomachs, teleost items showed increased importance with size, as did cephalopods in jack mackerel. In all, prey from 29 taxa, in seven broad taxonomic groups, were identified: Copepoda, Euphausiacea, Amphipoda, Decapoda, Gastropoda, Thaliacea, and ‘other’ (encompassing rarely seen taxa including foraminiferans, nematodes, and siphonophores; Table 3). The diets of both species were dominated by crustaceans, with IRI values of 98.1% and 69.9% for redbait and jack mackerel, respectively. Krill (Nyctiphanes australis) was the dominant crustacean consumed,

with IRI values of 65.7% for redbait and 43.9% for jack mackerel. Of the other crustaceans, only copepods were of significance to the diets; IRI values of 33.2% for redbait and 14.7% for jack mackerel. Gastropods, the vast majority being pteropods, also featured significantly

in the diet of jack mackerel (IRI of 26.1%) but were rare in the diet of redbait.

mackerel: Seasonal feeding and dietary overlap patterns between school mackerel (Scomberomorus queenslandicus) and spotted mackerel (S. munroi) in Queensland east-coast waters, Australia (16 degrees S to 28 degrees S), were examined from June 1992 to January 1995. School mackerel have a more diverse diet than spotted mackerel, with the diets of both species being dominated by pilchards, anchovies and herring. Dietary overlap between school and spotted mackerel appeared to be limited owing to temporal and spatial separation. The seasonal availability of certain prey items may play an important role in attracting mackerel into inshore waters where they become accessible to the commercial and recreational fisheries.

juveniles

|  |  |
| --- | --- |
| **prey item** | **probability of consuming** |
| ZME zooplankton | 0.3 |
| ZKL Krill | 0.05 |

|  |  |
| --- | --- |
| **prey item** | **probability of consuming** |
| ZME zooplankton | 0.3 |
| ZKL Krill | 0.3 |

References:

[Flyingfish feeding ecology in the eastern Pacific: prey partitioning within a speciose epipelagic community](http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=12&SID=X2xa2VRG4nVOJ9KsDdY&page=1&doc=2) Author(s): Van Noord, J. E.; Lewallen, E. A.; Pitman, R. L. Source: JOURNAL OF FISH BIOLOGY  Volume: 83   Issue: 2   Pages: 326-342   DOI: 10.1111/jfb.12173   Published: AUG 2013

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Title: [Feeding patterns of school mackerel (Scomberomorus queenslandicus) and spotted mackerel (S-munroi) in Queensland east-coast waters](http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=23&SID=X2xa2VRG4nVOJ9KsDdY&page=2&doc=18) Author(s): Begg, GA; Hopper, GA

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