

**Predatory impact on Patagonian squid after sudden range expansion of Argentine squid**

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Patagonian shelf and slope waters of the Southwest Atlantic are inhabited by two abundant and commonly allopatric squid species. Argentine shortfin squid *Illex argentinus* is associated mainly with temperate waters of the Patagonian Shelf, with the highest concentrations observed north-west of the Falkland Islands. Adult *I. argentinus* attain 800-1000 g in body mass. Patagonian longfin squid *Doryteuthis gahi* is associated with the transient zone between temperate shelf waters and Sub-Antarctic waters of the Falkland Current, and is most abundant south-east of the Islands. *D. gahi* are much smaller squid with adult body mass of 60-100 g. Both squid are important commercial stocks targeted by jigging (*I. argentinus*) and trawl (*D. gahi*) fleets. In April-May 2015, dense aggregations of *I. argentinus* emerged unexpectedly in the nursery and feeding grounds of *D. gahi*. They quickly dispersed commercial aggregations of *D. gahi*, causing early closure of the summer fishing season. Stomach analysis of *I. argentinus* in the nursery grounds showed that they mainly preyed upon adult *D. gahi* of the summer season cohort, and also on small *D. gahi* that should recruit to the following winter fishing season starting in August. Consequently, the following winter season showed very low *D. gahi* recruitment and had to be closed a month early. Possible ecological causes are discussed of the sudden appearance of predatory *I. argentinus* and their impact on the recruitment and stock size of *D. gahi*.

**Keywords:** *Doryteuthis gahi*, Falkland Islands, *Illex argentinus*, predation, recruitment