

LETTERS

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PREDATION OF SOUTHERN RED OCTOPUS (*ENTEROCTOPUS MEGALOCYATHUS*) BY STRIATED CARACARAS (*PHALCOBOENUS AUSTRALIS*) IN THE FALKLAND ISLANDS

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Globally near-threatened Striated Caracaras (*Phalcoboenus australis*; Birdlife International 2017) are scavenging and occasionally predatory birds of prey (Falconiformes) restricted to exposed islands in southernmost South America and the Falkland Islands (Islas Malvinas). During the austral summer, this inquisitive and gregarious species feeds primarily on seabird eggs, nestlings, and dead and dying adult seabirds at seabird colonies (Strange 1996, Catry et al. 2008), supplemented by marine and terrestrial invertebrates, e.g., Gastropoda and Diptera (Strange 1996, Rexer-Huber and Bildstein 2013), and placentas and carrion of marine mammals and livestock (Strange 1996, Catry et al. 2008). Juvenile caracaras often vie for carcasses in “gangs” of up to several dozen birds (Strange 1996, Catry et al. 2008, Rexer-Huber and Bildstein 2013), not unlike juvenile Common Ravens (*Corvus corax*) in the northern hemisphere (Heinrich and Marzluff 1991). In the winter months, when seabirds are largely foraging at sea, Saunders Island caracaras become food-stressed and lose body mass (Rexer-Huber and Bildstein 2013), and invertebrates and carrion may become more important resources, allowing them to subsist until the seabirds return.

The southern red octopus (*Enteroctopus megalocyathus*) is a commercially fished large benthic species with a sub-Antarctic distribution (Ortiz et al. 2011) found from the intertidal zone to a depth of roughly 140 m (Ibáñez and Chong 2008). To our knowledge, the only published reports of southern red octopus predators within the waters surrounding the Falkland Islands include southern sea lions (*Otaria flavescens*; Shallow Marine Surveys Group 2010), Gentoo Penguins (*Pygoscelis papua*; Clausen et al.

2005), and spiny dogfish (*Squalus acanthias*; Laptikhovskiy et al. 2001).

Saunders Island is a “nursery island” in the Falklands archipelago that supports over 100 Striated Caracaras throughout the year, most of which are nonbreeding juveniles and subadults (Harrington et al. 2018). On 10 February 2017, we observed 31 caracaras prey upon a southern red octopus (est. 3–4 kg in mass) in the exposed rocky intertidal area adjacent to a south-facing sandy beach on Saunders Island, Falkland Islands (51°18.59'S, 60°14.32'W). Prior to the predation event, the foraging group included 12 juveniles, three subadults, and one adult (aged according to plumage characteristics described by Strange 1996) that appeared to be searching for gastropods and other prey made available by a low spring tide. The birds pulled limpets (*Fissurella picta* and *Patinigera* spp.) from exposed overhanging rocks, crevices, and kelp (*Lessonia* spp.), and additional caracaras arrived to the 50-m² rocky intertidal zone as the tide receded.

At 1455 H (GMT–3 hr), a juvenile caracara found the octopus in a shallow tidal pool (<20 cm deep). The caracara took hold of one of the octopus' arms in its bill and pulled it to full extension. Two juvenile caracaras foraging within 1 m of the bird that first struck the octopus then joined in preying on the octopus, and one of the caracaras dismembered an arm by holding down the arm with its foot, seizing it in its bill, and tearing it away. The birds dislodged the octopus and pulled it onto the surface of an exposed rock where, inverted, the octopus tried to right itself (Fig. 1). Within 1 min of discovery, nine juvenile and three subadult caracaras had encircled and attacked the octopus. Five juveniles and two subadults bit off chunks of arm and retreated several meters to consume them. Within 2 min, an additional nine juveniles, eight subadults, and three adults had arrived. In total, 31 caracaras encircled the octopus. At 1457 H, the octopus still had three arms intact, as well as its head and mantle. By 1501 H, only the head and mantle remained, which the caracaras were able to grab with their talons and carry for 2–5 m,

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Figure 1. Juvenile and subadult Striated Caracaras encircling and consuming southern red octopus, 10 February 2017. Photo by K. Harrington.

before consuming them. The feeding event lasted less than 8 min.

Striated Caracaras complement their mainly seabird and insectivorous diet with a variety of other food resources (Strange 1996, Rexer-Huber and Bildstein 2013). Pellet analyses show squid remains in the diet of caracaras on New Island, 90 km to the west-southwest of Saunders Island (Catry et al. 2008), likely because Striated Caracaras consume spilled regurgitated food brought ashore by penguins for their young (Strange 1996, K. Harrington unpubl. data). Juvenile and adult Striated Caracaras have long been noted for experimenting with and testing their environment to determine the availability of suitable food resources (Darwin 1845, Strange 1996, Rexer-Huber et al. 2012). Our observation further highlights the species' dietary flexibility, a characteristic that may provide resilience in the face of environmental change and an adaptation to seasonal variations in food abundance in their island habitats. To our knowledge, there is no other record of a Falconid preying on an octopus.

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