

SHORT NOTE

Mutualistic and opportunistic foraging by red-billed gull (*Larus novaehollandiae*) around Hooker's sea lion (*Phocarctos hookeri*)

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During the breeding season, the red-billed gull (*Larus novaehollandiae*) feeds mainly in inshore waters on the plankton euphausiid *Nyctiphanes australis*, although some other marine invertebrates, small fish, terrestrial insects and earthworms are also taken (Blackburn 1962; Heather & Robertson 2005). A few birds may also specialise in stealing eggs from other red-billed gulls or from white-fronted terns (*Sterna striata*). In autumn and winter the diet is more varied and the gulls feed on offal, refuse, carrion, marine invertebrates, shellfish and fish (Heather & Robertson 2005). During bad weather they often head inland to feed on worms and insects forced to the surface in wet pastures or sports fields (Heather & Robertson 2005). They have also been observed eating berries of taupata (*Coprosma repens*), puka (*Meryta sinclairii*) and ngaio (*Myoporum laetum*) (Oliver 1955; Mills 1985; Hemmings 1988; Heather & Robertson 2005). This species of gull is therefore known to take locally abundant food supplies of varied nature opportunistically, and this note reports on two further examples, involving another species, Hooker's sea lion (*Phocarctos hookeri*).

In sunny conditions at about 1100 h on 7 Jan 2009, an adult red-billed gull was observed for ca. 15 min actively feeding on a 'swarm' of > 50 blowflies (Diptera; Calliphoridae; species not identified), attracted to a male Hooker's sea lion resting on the shore at Camp Cove, Campbell Is. The gull initially perched on the flank and back of the sea lion, taking blowflies from the body surface or snapping at the insects flying around the animal (Fig. 1). The sea lion rested with its head raised, before rolling on its side, lifting its left forelimb. The gull then moved

to the ground, continuing to snap at the numerous blowflies flying around the sea lion, at times making short flights into the air. Some wounds were evident on the back and left forelimb of the sea lion (Fig. 1), which may have attracted the blowflies. The sea lion had been moving around Camp Cove about an hour previously. After 15 min, our party left the area, but the gull was still actively fly-catching up to our departure.

Red-billed gulls can also associate with Hooker's sea lions for scavenging food. For example, on 9 Jan 2009 several gulls were amongst a group of female sea lions I observed at Sandy Bay, Enderby Is, in the Auckland Is. Fly-catching behaviour was not noted on that occasion. Rather, the gulls appeared to be scavenging after-birth tissue near newly-born pups, as were brown skuas (*Catharacta skua*; Fig. 2).

Hawking of insects by gulls has been observed previously. For example, Watt (1951a) reported red-billed gulls taking large insects, possibly crickets, in flight, at 6 to 60 m over farmlands on the Awanui-Kaitaia Plain. Watt (1951b) also watched a red-billed gull sitting by the rotting remains of a stingray, snapping at the surrounding blowflies. At Opoutere, Coromandel Peninsula, Brown (1982) watched up to 150 red-billed gulls regularly hawking insects from just after sunset until the light failed about an hour later. In this case, the gulls appeared to be taking small manuka beetles (*Pyronota edwardsii*) and possibly the pine longhorn beetle (*Navomorpha sulcatus*).

The red-billed gull I observed hawking insects while on the Hooker's sea lion was tolerated by the animal, reminiscent of the behaviour I have seen by common mynas (*Acridotheres tristis*) feeding on backs of New Zealand cattle, or by yellow-billed oxpeckers (*Buphagus africanus*) in South Africa. Certainly the relationship of the red-billed gull and

Received 30 Jan 2009; accepted 15 Jun 2009

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Fig. 1. Red-billed gull (*Larus novaehollandiae*) snapping at blowflies attracted to a male Hooker's sea lion (*Phocarctos hookeri*). There are wounds on the animal's back and left forelimb. Photo: Ben Bell.

the Hooker's sea lion was to some extent mutualistic, the gull exploiting a plentiful food-supply, and the sea lion benefitting from the reduction in the number of blowflies around it. I was only able to make brief observations on this behaviour, and more attention to such mutualistic relationships at sites where Hooker's sea lion is common, like Enderby Is, would seem to be warranted.

ACKNOWLEDGEMENTS

I thank Murray Williams for commenting on a draft of this Short Note.

LITERATURE CITED

- Blackburn, A. 1962. Feeding behaviour of red-billed gulls. *Notornis* 10(1): 42.
 Brown, B. 1982. Unusual feeding of red-billed gulls. *Notornis* 29(1): 77-78.



Fig. 2. Red-billed gulls (*Larus novaehollandiae*) and brown skuas (*Catharacta skua*) amongst Hooker's sea lions (*Phocarctos hookeri*) at Sandy Bay, Enderby Island. Photo: Ben Bell.

- Heather, B.D.; Robertson, H.A. 2005. *The field guide to the birds of New Zealand*. Viking, Auckland. Revised edition.
 Hemmings, A.D. 1988. Red-billed gulls feeding on ngaio at the Mokohinau Islands. *Notornis* 35(2): 116.
 Mills, J.A. 1985. Red-billed Gull *Larus novaehollandiae scopulinus* Forester, 1844, p. 222 in C.J.R. Robertson (Editor) *Reader's Digest Complete Book of New Zealand Birds*. Reader's Digest, Sydney.
 Oliver, W. R. B. 1955. *New Zealand Birds*, 2nd edition. Reed, Wellington.
 Watt, A.H. 1951a. Red-billed gull taking crickets (?) in flight. *Notornis* 4(5): 100.
 Watt, A.H. 1951b. Red-billed gull snapping at flies. *Notornis* 4(6): 137.

Keywords: red-billed gull; Hooker's sea lion; mutualism; Campbell Island; Enderby Island