

FEATURED PHOTO

SANDERLING SCAVENGING CRAB FRAGMENTS FROM A FORAGING WESTERN GULL

FLOYD E. HAYES, Department of Biology, Pacific Union College, 1 Angwin Ave., Angwin, California 94508; floyd_hayes@yahoo.com

VIVEK KHANZODE, 1623 Mariani Dr., Sunnyvale, California 94087; birdpixel@gmail.com

The Sanderling (*Calidris alba*) normally forages on a variety of live prey (Macwhirter et al. 2002). There are only a few previous reports of Sanderlings scavenging dead prey, including the carcasses of dead jellyfish and fishes on beaches (Gochfeld and Burger 1980, King 1981, Grimm 1984, Reneerkens et al. 2009). In two of these reports the Sanderlings scavenged fish carcasses after they had been ripped open by scavenging Herring Gulls (*Larus argentatus*; Gochfeld and Burger 1980) or Lesser Black-backed Gulls (*L. fuscus*; King 1981). In this note we document a Sanderling scavenging a crab preyed upon by a foraging Western Gull (*L. occidentalis*).

On the evening of 3 April 2011, Khanzode visited Half Moon Bay, San Mateo County, California, to photograph migrating shorebirds. At 17:51, he observed a Western Gull capture and kill a Northern Kelp Crab (*Pugettia producta*) on Maverick's Beach at Pillar Point (37° 29' 47" N, 122° 29' 44" W). As the gull manipulated the crab, a Sanderling flew in, stood within 0.5 m behind or to the side of the gull, and watched the gull devour the crab (see this issue's back cover, top photo). The Sanderling did not attempt to snatch the crab from the gull, and the gull ignored the Sanderling. After spending several minutes consuming a few large morsels of the crab, the gull abandoned the crab's carcass and flew away just after 18:00. Immediately afterward, at 18:01, the Sanderling began picking off the smaller pieces of crab tissue that the gull had left behind in the crab's carapace (back cover, middle and bottom photos). The Sanderling continued feeding on the crab carcass for about 15 min until all of the tissue was consumed.

This appears to be the first documented instance of a Sanderling scavenging on prey directly from a predator. Scavenging dead prey from a predator or another scavenger may be passive (beneficial for the perpetrator, neutral for the host) or result from kleptoparasitism, in which dead food is stolen from a host (beneficial for the perpetrator, costly for the host; Brockmann and Barnard 1979, Focardi et al. 2017). Herbert et al. (2019) pointed out that there is a continuum from passively scavenging dropped prey to aggressively coercing a victim to relinquish food. They suggested that the behavior switches from scavenging to kleptoparasitism when a victim takes evasive maneuvers to defend its food. In this case the Western Gull never took evasive measures to avoid losing its food to the Sanderling, which did not attempt to feed on the crab until after the gull departed, so this observation represents an instance of passive scavenging without any benefit or cost to the gull. Although the behavior is rarely reported in the literature, Sanderlings may scavenge prey fragments from predators or other scavengers more frequently than is currently recognized.

LITERATURE CITED

- Brockmann, H. J., and Barnard, C. J. 1979. Kleptoparasitism in birds. *Anim. Behav.* 27:487–514; doi.org/10.1016/0003-3472(79)90185-4.
- Focardi, S., Materassi, M., Innocenti, G., and Berzi, D. 2017. Kleptoparasitism and scavenging can stabilize ecosystem dynamics. *Am. Nat.* 190:398–409; doi.org/10.1086/692798.

FEATURED PHOTO

- Grimm, P. 1984. Gonaden der Ohrenqualle (*Aurelia aurita*) als Nahrung des Sanderlings (*Calidris alba*). Seevögel 5:24.
- Gochfeld, M., and Burger, J. 1980. Opportunistic scavenging by shorebirds: Feeding behavior and aggression. J. Field Ornithol. 51:373–375.
- Herbert, S. S., Hayes, F. E., and Hellie, M. H. 2019. Kleptoparasitism of the Sea Otter (*Enhydra lutris*) and Steller Sea Lion (*Eumetopias jubatus*) by the Glaucous-winged Gull (*Larus glaucescens*) at Seward, Alaska. Polar Biol. 42:1935–1941; doi.org/10.1007/s00300-019-02559-4.
- King, B. 1981. Feeding behaviour of wintering Sanderlings. Br. Birds 74:521–522.
- Macwhirter, R. B., Austin-Smith, P. Jr., and Kroodsma, D. E. 2002. Sanderling (*Calidris alba*), in The Birds of North America (A. F. Poole and F. B. Gill, eds.), no. 653. Birds N. Am., Inc., Philadelphia; doi.org/10.2173/bna.653.
- Reneerkens, J., Benhoussa, A., Boland, H., Collier, M., Grond, K., Günther, K., Hallgrímsson, T. G., Hansen, J., Meissner, W., De Meulenaer, B., Ntiamoa-Baidu, Y., Piersma, T., Poot, M., Van Roomen, M., Summers, R. W., Tomkovich, P. S., and Underhill, L. G. 2009. Sanderlings using African–Eurasian flyways: A review of current knowledge. Wader Study Group Bull. 116:1–20.

Accepted 9 September 2020