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**Fatal Paralytic Shellfish Poisoning in Kittlitz's Murrelet (*Brachyramphus brevirostris*) Nestlings, Alaska, USA**

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**Fatal Paralytic Shellfish Poisoning in Kittlitz's Murrelet (*Brachyramphus brevirostris*) Nestlings, Alaska, USA**



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**Abstract**

Paralytic shellfish poisoning (PSP) is an acute toxic illness in humans resulting from ingestion of shellfish contaminated with a suite of neurotoxins (saxitoxins) produced by marine dinoflagellates, most commonly in the genus *Alexandrium*. Poisoning also has been sporadically suspected and, less often, documented in marine wildlife, often in association with an outbreak in humans. Kittlitz's Murrelet (*Brachyramphus brevirostris*) is a small, rare seabird of the Northern Pacific with a declining population. From 2008 to 2012, as part of a breeding ecology study, multiple Kittlitz's Murrelet nests on Kodiak Island, Alaska, were monitored by remote cameras. During the 2011 and 2012 breeding seasons, nestlings from several sites died during mild weather conditions. Remote camera observations revealed that the nestlings died shortly after consuming sand lance (*Ammodytes hexapterus*), a fish species known to biomagnify saxitoxin. High levels of saxitoxin were subsequently documented in crop content in 87% of nestling carcasses. Marine bird deaths from PSP may be underreported.

**Keywords:**[Avian](http://www.bioone.org/keyword/Avian), [harmful algal bloom](http://www.bioone.org/keyword/Harmful%20Algal%20Bloom), [Kittlitz's Murrelet](http://www.bioone.org/keyword/Kittlitz%27s%20Murrelet), [paralytic shellfish poisoning](http://www.bioone.org/keyword/Paralytic%20Shellfish%20Poisoning), [saxitoxin](http://www.bioone.org/keyword/Saxitoxin)

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