

# **Observations of Hypopigmented Dolphins Sighted in Mexican and Alaskan Waters (2012-2013)**

## **Supplementary Table**

Christian D. Ortega-Ortiz,<sup>1</sup> Raziel Meza-Yañez,<sup>1</sup> Bertha Alicia Calleros-Negrete,<sup>2</sup>  
Leonard G. H. Sonten,<sup>3</sup> Marco A. Liñán-Cabello,<sup>1</sup> Aramis Olivos-Ortiz,<sup>1</sup>  
and Karina Acevedo-Whitehouse<sup>4</sup>

<sup>1</sup>*Facultad de Ciencias Marinas, Universidad de Colima, Manzanillo, Colima, México*  
*E-mail: christian\_ortega@ucol.mx*

<sup>2</sup>*Centro Universitario de Ciencias Biológicas y Agropecuarias, Universidad de Guadalajara, Jalisco, México*

<sup>3</sup>*Van Hall Larenstein, Agora 1, 8934 CJ, Leeuwarden, Netherlands*

<sup>4</sup>*Facultad de Ciencias Naturales, Universidad Autónoma de Querétaro, Querétaro, México*

**Supplementary Table S1.** World chronological scientific records of killer whales (*Orcinus orca*) reported with hypopigmentation

Record #	Date	Location	Age class	Description	Sex	Citation(s)
1	August 1923	Chatham Sound, British Columbia, Canada	--	White individual	--	Moran, 1924
2	2 January 1942	Marine waters of Washington State	Calf	All white	--	Scheffer & Slipp, 1948
3	22 March 1946	Marine waters of Washington State	--	White individual	--	Scheffer & Slipp, 1948
4	Mid-1930s	Anadyr Gulf, Chukotka, Russia	--	White individual	Male	Zenkovich, 1952
5	1923-1959	British Columbia, Canada	Calf	White individual	Female	Carl, 1959
6	Not available	Vancouver, British Columbia, Canada	--	--	--	Cousteau & Dolé, 1972
7	1 March 1970	Vancouver, British Columbia, Canada	Calf	Chediak-Higashi Syndrome	Female	Taylor & Farrel, 1973; Ridgway, 1979
8	1 October 1977	Great Barrier Island, New Zealand	--	--	--	Fertl et al., 1999
9	June 1985	Azores, Portugal	--	--	--	Pilleri & Pilleri, 1987
10	27 August 1992	St. Lawrence Island, northern Bering Sea	Adult	Possibly albinistic; behind the dorsal fin showing as lighter, white color	Male	Speckman & Sheffield, 2001
11	2001-2005	Okhotsk Sea, Russia	--	White individual	--	Karyakin, 2006
12	Summer/fall 2000	Aleutian Islands, Alaska	Adult	Possibly albinistic; an almost all white individual	Male	Renner & Bell, 2008
13	Not available	Kanaga Volcano, Alaska	Adult	Possibly albinistic; a white-yellowish individual	Male	Pemberton, 2008
14	December 2009	Victoria, British Columbia, Canada	Calf	White transient	--	Vancouver Aquarium, 2012
15	2010-2015	Commander Islands, Russia	Adult	Possibly albinistic	Male	Filatova et al., 2016
16	2008-2011	Commander Islands, Russia	Calf/ juvenile	White individual	--	Filatova et al., 2016
17	2009-2010	Commander Islands, Russia	Adult	White individual	Female	Filatova et al., 2016
18	August 2012	Juneau, Alaska	Calf	Leucism	--	This report
19	28 August 2014	Kuril Islands, Japan	Juvenile	White individual	--	Filatova et al., 2016
20	29 August 2014	Sakhalin Island, Russia	Adult	White individual	Female	Filatova et al., 2016
21	29 August 2014	Sakhalin Island, Russia	Juvenile	White individual	--	Filatova et al., 2016
22	7 August 2020	Southeast Alaska	Calf	Leucism	Male	Rozell, 2020
23	May-July 2019	Hokkaido, Japan	2 adults	Albinism or leucism	Male/ female	Ohizumi et al., 2020
24	24 July 2021	Hokkaido, Japan	1 adult/ 1 calf	Both white	Male/ unknown	Kamimura, 2021

## Literature Cited

- Carl, G. C. (Ed.). (1959). Albinistic killer whales in British Columbia. In *Report for the year 1959* (pp. 29-36). Provincial Museum of Natural History and Anthropology.
- Cousteau, J., & Dolé, P. (1972). *The whale: Mighty monarch of the sea*. Doubleday.
- Fertl, D., Pusser, L. T., & Long, J. J. (1999). First record of an albino bottlenose dolphin (*Tursiops truncatus*) in the Gulf of Mexico, with a review of anomalously white cetaceans. *Marine Mammal Science*, 15(1), 227-234. <https://doi.org/10.1111/j.1748-7692.1999.tb00794.x>
- Filatova, O. A., Fedutin, I. D., Titova, O. V., Sivior, B., Burdin, A. M., & Hoyt, E. (2016). White killer whales (*Orcinus orca*) in the western North Pacific. *Aquatic Mammals*, 42(3), 350-356. <https://doi.org/10.1578/AM.42.3.2016.350>
- Kamimura, M. (2021). In possible world first, pair of white orcas seen off Hokkaido. *The Asahi Shimbun*. <https://www.asahi.com/ajw/articles/14409192>
- Karyakin, K. A. (2006). Records of killer whales (*Orcinus orca*) of anomalously white coloration in the sea. In V. M. Belkovich (Ed.), *Marine mammals of the holarctic: Collection of scientific papers after the Fourth International Conference* (pp. 238-240), St. Petersburg, Russia.
- Moran, J. (1924). Killer whales at Green Island lighthouse. *Canadian Field-Naturalist*, 38, 84-85.
- Ohizumi, H., Haba, S., Nakahara, F., Mitani, Y., Kita, Y. F., Saino, S., & Yoshioka, M. (2020). First record of white killer whales (*Orcinus orca*) in Nemuro Strait, eastern Hokkaido, Japan. *Mammalian Science*, 60(2), 243-248.
- Pemberton, M. (2008). White killer-whale spotted off Alaska. *Adventure Sports Outdoors*. 47 pp.
- Pilleri, G., & Pilleri, O. (1987). Records of cetaceans in the Mediterranean Sea and North Atlantic Ocean in the period 1982-1986. *Investigations on Cetacea*, 20, 267-280.
- Renner, M., & Bell, K. (2008). A white killer whale in the central Aleutians. *Arctic*, 61(1), 102-104. <https://pubs.aina.ucalgary.ca//arctic/Arctic61-1-102.pdf>; <https://doi.org/10.14430/arctic10>
- Ridgway, S. H. (1979). Reported causes of death of captive killer whales (*Orcinus orca*). *Journal of Wildlife Diseases*, 15(1), 99-104. <https://doi.org/10.7589/0090-3558-15.1.99>
- Rozel, N. (2020). White killer whale spotted in Southeast Alaska. *UAF News and Information* [University of Alaska Fairbanks]. <https://news.uaf.edu/white-killer-whale-spotted-in-southeast-alaska>
- Scheffer, V. B., & Slipp, J. W. (1948). The whales and dolphins of Washington State with a key to the cetaceans of the west coast of North America. *American Midland Naturalist*, 39(2), 257-337. <https://doi.org/10.2307/2421587>
- Speckman, S. G., & Sheffield, G. (2001). First record of an anomalously white killer whale, *Orcinus orca*, near St. Lawrence Island, northern Bering Sea, Alaska. *Canadian Field-Naturalist*, 115(3), 501-502. [www.researchgate.net/publication/292400185](http://www.researchgate.net/publication/292400185)
- Taylor, R. F., & Farrell, R. K. (1973). Light and electron microscopy of peripheral blood neutrophils in a killer whale affected with Chediak-Higashi Syndrome. *Federation Proceedings*, 32, 822.
- Vancouver Aquarium. (2012). Killer whales—not always black and white. *Whale News* [E-mail newsletter of the Vancouver Killer Whale Adoption Program]. <http://killerwhale.vanaqua.org/page.aspx?pid=1529>
- Zenkovich, B. A. (1952). *Whales and whaling*. Pishepromizdat. 156 pp. [In Russian]