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The current migratory routes and wintering areas of gray whales in the western North Pacific are enigmatic. Historical evidence indicates that coastal waters off Japan were an important part of the migratory route but modern day observations of gray whales off Japan are uncommon. Fewer than 20 sightings or strandings of gray whales in Japanese waters have been documented between 1990 and 2015 (Nambu *et al.* 2010; Kato *et al.* 2014).

Here we report on two gray whale sightings in 2015 from off the Pacific coast of Japan. These observations include:

(1) A gray whale sighted and photographed¹ between 17 and 21 March 2015 in coastal waters off Kozu Shima Island, Japan. Kozu Shima is one of the seven islands in the Izu Archipelago and is approximately 180 km south of Tokyo (Figure 1). This same whale was also seen and photographed at Niiijima Island (another one of the Izu Islands) on 22 and 24 March 2015. Lateral flank and dorsal fluke images were obtained.

(2) A gray whale sighted and photographed² between 19 April and 9 May 2015 in coastal waters of Suruga Bay off Shimizu, Japan. Suruga Bay is located on the Pacific coast of Honshu, Japan (Figure 1). Dorsal and ventral fluke images were obtained.

Photographs and videos collected during these sightings were compared to the 1994-2014 Russia-U.S. photo-identification catalog from Sakhalin Island, Russia (Weller and Burdin 2015). The whale identified off Kozu Shima and Niiijima was photographically matched to a whale identified off Sakhalin during the summer of 2014. This individual, first identified as a calf off Sakhalin in 2014, was observed three times together with its mother and one time alone during August 2014. The mother of this calf is a known 12-year old female. She was first sighted off Sakhalin Island as a calf in 2004 and 2014 was her first known calving event.

Fluke images of the whale observed in Suruga Bay were also compared to the Russia-U.S. photo-identification catalog from Sakhalin Island. The quality of these images was marginal and a match to the Sakhalin catalog was not made. However, when these fluke images were compared to a fluke photo of the whale from Kozu Shima and Niiijima, a confirmed match was found. Thus, the same individual whale was matched between Kozu Shima and Niiijima (March 2015), Suruga Bay (April-May 2015) and Sakhalin Island (August 2014).

The occurrence of gray whales off the Izu Islands has been previously reported (Darling 1994). In this case, three gray whales were observed feeding in coastal waters off Izu-Oshima which is the northernmost of the islands in the Izu Archipelago. Similarly, a number of relatively recent records of gray whales from the Pacific coast of Honshu also exist (Kato *et al.* 2014). One of these records includes a female yearling entrapped in a set net in January 2007 that was matched to earlier photographs of it as a calf (with its mother) while on the Sakhalin feeding ground in July and August 2006 (Weller *et al.* 2008). This match

¹ Photos by N. Takanawa

² Photos by M. Tatsunami

from 2006 (Sakhalin) and 2007 (Japan) along with the new matches from 2015 provide additional verification of a migratory link between the summer feeding ground off Sakhalin Island and a wintering location somewhere along the coast of Asia.

While observations of gray whales in Japan have been made between November and August, most records are concentrated between March and May (Kato *et al.* 2014). Observations in the March-May period are particularly intriguing in that they correspond with the time when gray whales in the eastern North Pacific are migrating north from Mexico to the Bering Sea. With this in mind, we hypothesize that the March-May records from Japan, inclusive of the 2015 records detailed herein, represent whales migrating north on their way to their summer feeding ground off the northeastern coast of Sakhalin Island or possibly other areas in the Okhotsk Sea.

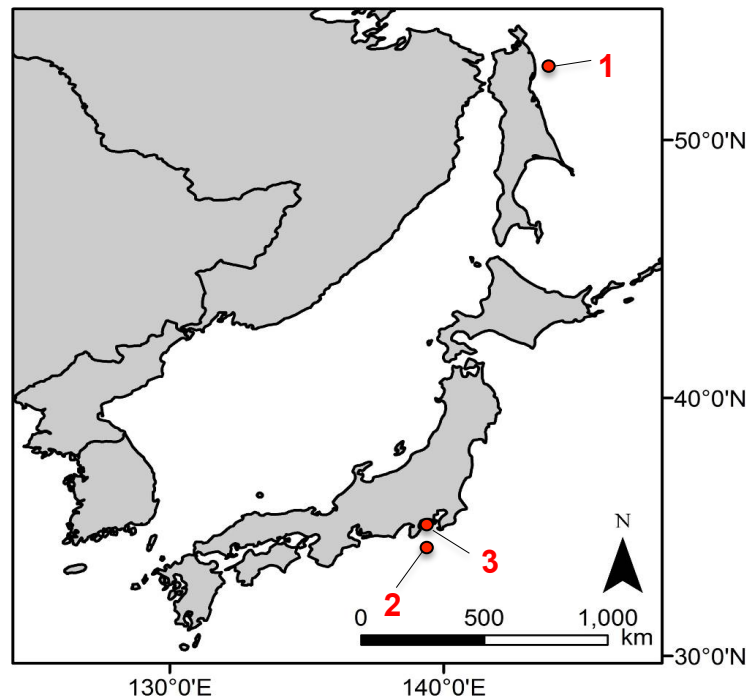


Figure 1. Point 1 = Sakhalin Island, Russia. Point 2 = Kozu Shima and Nijijima Islands, (Izu Islands), Japan. Point 3 = Surgua Bay, Japan.

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