

Sound News

8th International Conference

The Culture of Whales: The Animals, The People, The Connections

The American Cetacean Society's 8th International Conference will be held in Seattle this year. This is the first time it's been held outside of California, and we look forward to making it a huge success. For more information or to volunteer, please contact us at: acs@cetaceanresearch.com 206-297-1310

Election Results Are In

Thank you to all members who voted for our new officers and board members. See page 5 for the results.

Cetacean Fun Facts!

Page 3 has our newest Whulj feature. Each Cetacean Fun Facts article will focus on a particular species of whale. On the back is Kid's Quest—activities for kids (and kids-at-heart!). In this edition, we take a closer look at the blue whale.

Two New Babies

This past fall, the Southern Resident Community welcomed two new babies. An article on page 5 has all the details.

L98 Update

Since July 2001, mariners frequenting Nootka Sound on the northwest coast of Vancouver Island have been observing a small, lone killer whale. On page 2, an update on L98.

Speaker Series 2002

We have a new location and set dates for our Speaker Series! Attendance has been down and our hope is that this new location will make it easier for you to attend these interesting, educational, fantastic, fun, and free events that will be on the 4th Thursday of each month. We welcome your feedback about these meetings and how we can make it easier for you to attend. Contact us at: acs@cetaceanresearch.com

Phinney Neighborhood Center, Room 6

6532 Phinney Avenue N, Seattle
Just north of the Woodland Park Zoo

Free parking is available in the Center's parking lot and in the surrounding neighborhood

Doors open at 7:00 pm · Program begins at 7:30 pm

4th Thursday of each month · Admission is FREE

For more info call: 206-297-1310

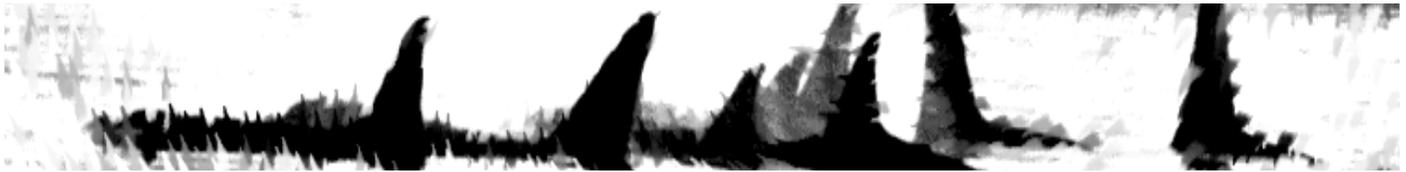
E-mail: acs@cetaceanresearch.com

February 28th — The Summer Home of the Harbor Porpoise

Anna Hall, of the University of British Columbia, has been conducting research on harbor porpoise in the waters off southern Vancouver Island since 1995. The first recipient of an ACS/Puget Sound grant, issued in 2000, Anna's present research is focused on habitat use, prey species, and interactions with fisheries. She will discuss her research and tell us what she has discovered about the unique way these cetaceans interact with their environment.

March 28 — Pacific Coast Humpbacks: Past, Present, Future

Dr. Fred Sharpe, of Simon Fraser University, will talk about the unique population of Pacific Coast humpback whales, focusing on the past, the present, and the future.



Observations of L98 in British Columbia July 2001 to January 2002

John K.B. Ford and Graeme M. Ellis
Marine Mammal Research
Pacific Biological Station
Department of Fisheries and Oceans
February 1, 2002

Since July 2001, mariners frequenting Nootka Sound on the northwest coast of Vancouver Island have been observing a small, lone killer whale. The first documented sightings were reported to the Pacific Biological Station and the BC Cetacean Sightings Network in mid September. The observers reported that they had seen the whale on numerous occasions since mid July, always in the same location.

During a sea otter survey flight on 5 October, marine mammal biologists Graeme Ellis, John Ford, and Jane Watson searched the reported location by helicopter, and were able to confirm that the animal was indeed a juvenile killer whale.

On 12 November, Graeme Ellis and Jane Watson travelled by boat to the area in an attempt to locate the whale and to make observations and collect photographs for potential individual identification. The whale was found and photographed, although weather conditions were too poor for good photography. Subsequent analyses of these ID photos suggested that the whale was most likely L98, a young whale born to the southern resident L pod in 1999 and reported missing in June 2001 by researchers with the Center for Whale Research, Friday Harbor. Improved photographs were needed for positive identification.

On 25 November, Graeme Ellis and John Ford travelled once more to the site to obtain additional ID photographs and to make observations of the animal's behaviour and physical condition. The whale was again found in the same location. It appeared to be in good condition, swimming and surfacing in an energetic fashion and showing no obvious physical signs of emaciation. It was observed to catch and eat a salmon. Observations and photographs revealed sloughing skin on the dorsal fin, which was not evident on 12 November. It occasionally responded to the boat by approaching to within 20-30 m, but not closer. Comparison of ID photographs collected on this day with a photographic catalogue of southern residents maintained by the Center for Whale Research confirmed the identity as L98.

The situation with L98 is extremely unusual. Resident killer whales live in very stable kin groups called *matrilines*. A whale born to a matriline rarely if ever strays for long from this group, especially in the case of young animals. Since photo-identification studies began in the early 1970s, there have been no cases where a young whale observed to be absent from its matriline for more than a few days, has returned to that matriline, or any other group. There are only two past incidents on record that bear some resemblance to the L98 situation.¹ In early January, 2002, another lone juvenile killer whale was discovered in Puget Sound. The behaviour of this unidentified individual appears rather similar to that of L98.

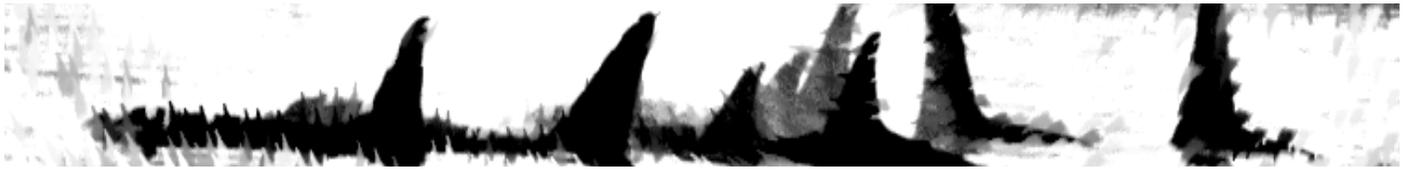
It is not known how L98 came to be alone in Nootka Sound. It is possible that it accidentally strayed and became separated from its group somewhere off the west coast of Vancouver Island, then wandered into the area. There is no physical barrier preventing it from leaving, but it appears to be reluctant to travel outside of a small area. We are uncertain how likely it is that L98 will become reconnected with L pod. The area frequented by L98 is far from the known travel and foraging routes of L pod, and there is no record of the pod at or near this location since studies began over 25 years ago. However, the range of L pod during the winter and spring is mostly unknown, and it may be that the pod does occasionally enter Nootka Sound. If so, the juvenile may become reunited with its group.

(continued on page 5)

¹ There are two previous incidents on record in this area that are of interest and are relevant to the L98 situation. In 1977, a lone killer whale calf was found by a sport fisherman in Menzies Bay, north of Campbell River, BC, approximately a month after it had been sighted alone in Nanaimo harbour. Within a week, the fisherman gained the whale's trust and began feeding it herring. However, the whale was clearly in poor health, so DFO authorized its capture by Sealand of the Pacific, Victoria. The whale, whose identity was unknown, recovered and lived at that facility until its death several years later. The other incident involved a five-year old whale, A57, which was discovered alive but in distress in a small bay on 16 December, 1996. It died several hours later. Necropsy examination showed that the whale succumbed to a major bacterial infection, but was otherwise in good physical condition.

ACS/PS Scientific Advisors

Dr. David Bain, Dr. Robin Baird, John Calambokidis, Dr. John Ford, Dr. Richard Osborne,
Dr. Adam Pack, and Dr. Peter Ross



Cetacean Fun Facts!

by Laurie Mollo-McLain

The Blue Whale



Welcome to Cetacean Fun Facts! This section of *Whulj* has been created to give you the opportunity to expand your knowledge of cetacean species around the globe. In this issue, we discover and explore *Balaenoptera musculus*, common name blue whale.

A LITTLE BIT OF CLASSIFICATION

In the order Cetacea, there are two suborders: mysticeti, which are whales with baleen, and odontoceti, which are toothed whales. Blue whales are categorized as mysticeti, and then are classified into the family Balaenopteridae, which are the rorqual whales (*rorqual* is an old Norse word meaning “groove throat”). Six species of baleen whales make up the rorqual family; five of them, including the blue, are grouped into the genus *Balaenoptera*. The species name for a blue whale is *musculus*.

PHYSICALITY

The largest blue whale measurements verified by scientists were up to 98 feet long, which makes *Balaenoptera musculus* the largest living mammal ever known to have inhabited the planet. The average size of blue whales, with females being slightly larger than males, ranges between 70–90 feet long. This is about the size of two metro buses—imagine that the next time you see a bus!

Blue whales are blue-gray in color and weigh a whopping 160 tons or more. The tongue weighs as much as an elephant and its heart is the size of a Volkswagen bug. They have long, thin flippers, which average 8 feet (2.4m), and their flukes average 25 feet (7.6m). Located near the flukes is a very small dorsal fin measuring 1 foot (30cm).

As a rorqual, the blue whale has 55-68 throat pleats that expand to increase the amount of food they take in.

DIET AND FEEDING

In contrast to the enormous size of blue whales, they ingest some of the smallest creatures on the planet. These planktonic creatures, krill, or euphausiids, are small shrimp-like organisms measuring in at a mere 0.5–5.5 inches long. Blue whales are known to consume an estimated 4 tons per day.

With each mouthful, the pleats of this rorqual expand for intake of krill and water and contract as the tongue forces the water out through the filtering baleen (which in blue whales is black). This method, also known as filter feeding,

leaves loads of krill behind the baleen plates for consumption.

DISTRIBUTION AND MIGRATION

Blue whales may be found in all oceans of the world but once lived mostly in the Southern Hemisphere, with smaller populations in the North Atlantic and North Pacific.

They migrate long distances between low latitude winter mating grounds and high latitude summer feeding grounds and are often seen in the Pacific Ocean off California, the Gulf of California (Sea of Cortez), the Gulf of St. Lawrence, the waters off Canada, and the northern Indian Ocean. They travel at approximately 5 miles per hour, but have been known to reach up to 20 miles per hour when active or confronted with perilous circumstances.

The estimated current population of 2,000–3,000 in the Pacific Ocean off California is higher than that estimated in any other ocean.

SOUND

The call of the blue whale can reach levels of 188 decibels, which can travel over hundreds of miles through the water.

DIVING

Blue whales generally dive for up to 20 minutes, reaching a depth of 1,000 feet.

SOCIAL GROUPS

Blue whales are primarily solitary animals, although they frequently swim in pairs or small pods. There have been sightings of up to 200 whales in an area assumed to be associated with feeding grounds.

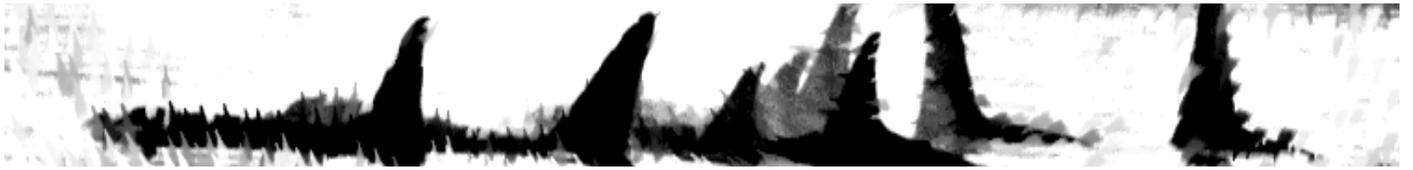
Kids! On the back of this page is Kid's Quest—with activities just for you!!

You can find more interesting facts and details about this cetacean species and others at www.acsonline.org. For some spectacular photos of this graceful creature, please visit: www.earthwindow.com/blue.html

If you have any comments or suggestions, contact the author at:
ForCetaceans@hotmail.com
Cetacea@marine-biology.zzn.com

Suggested reading: Calambokidis, J. and G.H. Steiger. 1997. *Blue Whales*. Worldlife Series Library. Voyager Press, MN. 72 pp.

*A special thanks to John Calambokidis of Cascadia Research for his scientific contribution.



KID'S QUEST

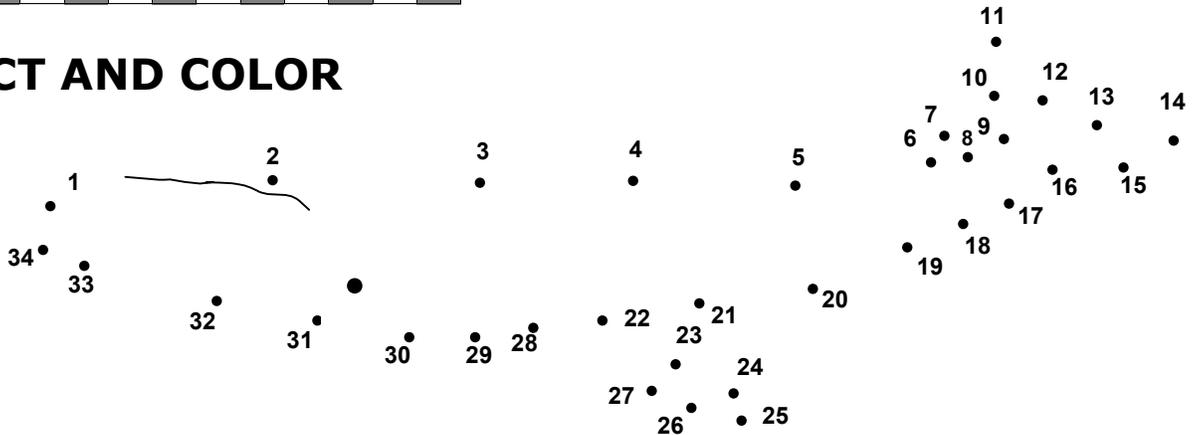


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SEEK AND FIND

- CETACEAN
- BALEEN
- FILTER FEEDING
- BLUE WHALE
- OCEAN
- BLACK
- KRILL
- MAMMAL

CONNECT AND COLOR



QUIZ

1. The blue whale is the _____ mammal on the planet.
 - a. fastest
 - b. silliest
 - c. largest
 - d. funniest
2. The blue whale collects its food by a process known as _____.
 - a. munching
 - b. krill feeding
 - c. pigging out
 - d. filter feeding
3. The baleen plates of the blue whale are what color?
 - a. orange
 - b. blue
 - c. black
 - d. white
4. The blue whale can dive for up to _____.
 - a. 2 hours
 - b. 20 minutes
 - c. 12 minutes
 - d. 1 hour



Created by Laurie Mollo-McLain

Answers to Quiz: 1. c, 2. d, 3. c, 4. b



(continued from page 2)

On 3 December, a meeting of killer whale specialists was held in Vancouver to discuss the situation and to develop a response strategy. Representatives from Fisheries and Oceans Canada, the Center for Whale Research (Friday Harbor, WA), the Vancouver Aquarium Marine Science Centre, and the University of British Columbia were present. The group agreed that the whale should be monitored regularly and, if it began to show signs of deteriorating health, a plan for intervention would be developed.

L98 has been monitored four times since this meeting, the most recent being 21 January, 2002. On each occasion, it appeared to be in good health and exhibited energetic,

playful behaviours around the boat. It was again observed feeding, and scale samples from a salmonid kill were collected.

Future Plans

We will continue regular field trips on a biweekly basis to monitor the health status of L98. Behaviour and appearance will be documented with photographs and video. Fisheries and Oceans will undertake conservation and protection patrols as required to ensure the whale is not disturbed. A team of killer whale specialists will be assembled to consider various options for future action if needed.

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Southern Resident Orcas Welcome Two New Relatives

by Ann Stateler

Independent researcher Mark Sears discovered two new orca babies this past fall. He spotted one baby on October 29, near Vashon Island, in a superpod of 60 orcas from J, K, and L Pods. The baby had fetal folds, suggesting recent birth, possibly just hours earlier. In what looked like a welcoming ritual, the orcas focused all attention on their newest relative. They held the baby at the surface to breathe, rubbing and nudging the tiny form.

Orcas may have the closest family ties of any species. Researchers have observed ceremonious activity around births in several orca populations.

During this encounter, both K and L Pod females were intimate with the newborn. While tracking a superpod near Edmonds on November 4, Mark discovered *another* new calf. After carefully studying his video, Mark and Center for Whale Research staff identified the moms as Splash, L-67, and Skagit, K-13.

Splash, L-67, is 16. Her newborn is designated L-100. The baby's grandmother is 41-year-old Grace, L-2. Splash lost her last baby, Luna, L-98, born in 1999. L-100's birth is especially good news for L Pod, since no L Pod baby born after 1996 has survived.

Skagit, K-13, is 29 and this is her fourth baby, designated K-34. Skagit also has two sons, Spock, K-20, and Scoter, K-25, and a daughter, Deadhead, K-27. This family is remarkable because it consists of four generations, including matriarch and great-grandmother Lummi, K-7. Lummi's estimated birth year is 1910, making her the eldest orca in the Southern Resident Community.

The sex of both calves is unknown at this time. The Whale Museum customarily holds a naming contest when baby orcas reach age one. Infant mortality is high for the Southern Residents, but these babies may have a better chance of surviving since they are not first-borns. Some researchers believe first-borns receive higher concentrations of bioaccumulative toxins through nursing than subsequent calves.

With these two babies, the Southern Residents now number 80. This is still far from 99 orcas in 1995, but every birth brings hope. National Marine Fisheries Service is currently reviewing a petition to list the Southern Residents under the Endangered Species Act.

Welcome, K-34 and L-100!

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AMERICAN CETACEAN SOCIETY



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LABEL

My, How Times Have Changed...

Killer Whale (Collier's Encyclopedia, © 1952–1953): The killer whale is one of the most vicious predators of the seas, and is widely known as the "killer." The males grow to 30 ft. and have a huge 5 to 6-ft. straight dorsal fin; the females are smaller growing to 20 ft., with a smaller dorsal fin. Males and females often go in packs of from three to twelve or so and sweep the seas for their prey. They eat principally seals, fish, small porpoises, large sea birds, and occasionally whales. Some human beings have sworn that they were the intended victims of killer whales which swam rapidly in the direction of their small boats with tall fins cutting the water like those of enormous sharks. In the Antarctic regions, the killer whale cruises the pack-ice, and often thrusts its head far out of the water, apparently to look over an intended victim. They are said to bump the ice to throw a seal, or even a man, into the water to be devoured. Such intent and action also has been denied. When attacking a whale, the killers apparently concentrate on the mouth, forcing out the tongue, which is devoured. They are said also to paralyze some whales with fright. Besides the tall fin, the killers may be distinguished by a peculiar black and white coloration. There is a large white spot over the eye, and the belly is completely white, with an extension up the sides behind the fin. The back and sides are black. There are from twenty to twenty-eight sharp, stubby, strong teeth in each jaw.

YES! ENROLL ME AS A MEMBER OF THE PUGET SOUND CHAPTER OF THE AMERICAN CETACEAN SOCIETY!

MEMBERSHIP CATEGORIES: (check one)

Name: _____
Address: _____
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<input type="checkbox"/>	\$250	Contributing
<input type="checkbox"/>	\$75	Supporting
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<input type="checkbox"/>	\$35	Active
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