Soundings

American Cetacean Society – Monterey Bay Chapter
PO Box HE, Pacific Grove, CA 93950

JUNE 2018

Don't Miss ACSMB's Annual BBQ!

Growing into our 39th year

Saturday, July 7th, 2-5 pm
Indian Village in Del Monte Forest
(off 17 Mile Drive* near the Bird Rock Vista Point)

Please join us for a fun afternoon with great people, good food and a fabulous raffle & silent auction!

Menu includes grilled tri-tip, chicken, sausage, salads, beans, rolls and cake. We will have water, soft drinks and coffee. BYOB and table setting.

Send payment of $25 per person to:
ACSMB, P.O. Box HE, Pacific Grove, CA 93950,
or pay at the event.

Questions? Contact Katlyn Taylor at
katlyn.taylor.oc@gmail.com

*Please note that the 17 Mile Drive entrance fee will be waived for BBQ attendees.

We will not be having a June meeting, and the BBQ replaces our regular July meeting at Hopkins Boatworks Hall.

INSIDE THIS ISSUE

ACS Monterey Bay chapter needs you!

Please consider volunteering to serve on the ACS Board of Directors. Current openings include Membership Chair and Publicity Chair.

If you enjoy learning about whales and sharing your passion with others, we'd like to speak with you. Please contact any board member for more information.

CALENDAR

Jun. 15: Exhibit opening at the CA Academy of Sciences in San Francisco: "Giants of Land and Sea." This exhibit celebrates the extraordinary biodiversity in our own backyard. From whales to giant sequoias, California is home to an extraordinary assemblage of life.

Jun. 16: Celebration of Art Haseltine's life at Asilomar at 1 PM. If you have not yet RSVP'd your attendance, please call Diane at 831-214-1016.

Jun. 26: Lecture at the Pacific Grove Library: Jonathan White speaks about his book, Tides: The Science and Spirit of the Ocean. 7:30 PM.

Jul. 7: ACSMB Annual BBQ at Indian Village in Pebble Beach. More information on previous page. $25/person cost can be sent to ACSMB, P.O. Box HE, Pacific Grove, CA, 93950.

Jul. 7: International Save the Vaquita Day 2018. For more information go to vivavaquita.org.

Jul. 16-20: Superpod 6 in Friday Harbor San Juan Island, Washington. This five-day symposium on Southern Resident Killer Whales will include international killer whale scientists, filmmakers, authors, journalists, and naturalists! Whale watching opportunities will be ubiquitous.

Jul. 21: ACS/LA Summertime Blues (and Humpbacks) Whale Watching Adventure on the *Condor Express*. 8 AM – 4 PM, departing from Sea Landing in Santa Barbara Harbor.

Jul. 24: ACS SF Bay presents a talk by Dr. Shawn Johnson, Director of Veterinarian Science at the Marine Mammal Center: "Not Just Seizing Sea Lions: How Domoic Acid is Impacting Southern Sea Otters."

Aug. 11: Whalewatching with ACS Monterey Bay and Discovery Whale Watch on Fisherman's Wharf. Join us for our annual fundraiser! 8 AM – 12 Noon. $45. Mail check to ACS MB, P.O. Box HE, Pacific Grove, CA, 93950 or call Katlyn Taylor at 971-322-8425.

Nov. 2-4: American Cetacean Society 16th International Conference at the Hyatt Regency in Newport Beach, CA. Conference Theme: Whales & Us: The Next Generation.

BOOK RECOMMENDATIONS

Vaquita: Science, Politics, and Crime in the Sea Of Cortez, by Brook Bessesen. 2018 Island Press.

Eye of the Shoal: The Fishwatcher's Guide to Life, the Ocean and Everything, by Helen Scales. 2018 Bloomsbury Sigma.

Ancient Landscapes of Western North America: A Geologic History with Paleogeograhic Maps, by Ronald C. Blakey and Wayne D. Ranney. 2018 Springer.

SENATE PASSES BILL TO PROTECT MARINE WILDLIFE FROM CALIFORNIA DRIFTNETS

May 30, 2018 — Today, SB 1017, a bill that would transition California away from the use of large-scale driftnets, successfully cleared the California Senate. The bill was approved 33-0 and will now head to the state Assembly.

SB 1017, authored by Senator Ben Allen, D-Santa Monica, would:

- Implement a driftnet permit buyback program;
- End the use of driftnets after the 2023 fishing season (new entrants into the swordfish fishery will be directed toward the use of lower impact fishing gears for a modernized fishery).

The bill is co-authored by Senator Wieckowski and Assembly Members Bloom, Levine, and Mark Stone.

This is the first time a bill of this type has made it to the California Senate.

According to data from the National Oceanic and Atmospheric Administration, only one in eight of the animals caught in California's driftnets is a swordfish. The nets kill more than 70 different species of ocean wildlife. Large-mesh drift gillnets have been banned by the United Nations on the high seas, by a host of countries, and throughout much of the United States.

California is the last state in the U.S. to allow drift gillnet fishing for swordfish and thresher shark off its coast.

Federal bills have been introduced in both the House and Senate to phase out the use of large mesh driftnets off the coast of California.

Senator Ben Allen speaks at the Capitol about drift gillnets.

"I am pleased the approach taken in SB 1017 to phase out the use of this damaging equipment earned broad bipartisan support in the Senate today," said Senator Ben Allen (D – Santa Monica). "I look forward to continuing to work with stakeholders on a plan that protects marine life while being fair to everyone involved."

"Drift gillnets have an outsized impact on ocean health and the sportfishing community has been working for decades to remove them," said Bob Kurz, trustee of International Game Fish Association and board member of Coastal Conservation Association California. "This bill is both fair and reasonable, will address the issue of bycatch, compensate commercial fisherman for retiring their nets and provide a path towards sustainable gear."

"We have been working to reduce the devastating and cruel impact of this driftnet fishery on whales, dolphins and sea turtles for 20 years, and passage of this legislation will go a long way toward making the Pacific Ocean safer for endangered marine wildlife," said Todd Steiner, biologist and executive director of Turtle Island Restoration Network.

"This is a huge success," said Cassie Burdyshaw, Advocacy and Policy Director of Turtle Island Restoration Network. "We're thrilled to see that California legislators are voting in favor of our ocean."

https://seaturtles.org/newssection/20181/

NZ Has its Own Population of Blue Whales, Study Reveals

By Jamie Morton

May 18, 2018 — New Zealand has its own population of the largest animal of the world - the blue whale.

That's according to US and Kiwi researchers who say a group of blue whales found around the South Taranaki Bight are genetically distinct from those in the Pacific and Southern oceans.

Their just published study showed a high level of residency, as hydrophones deployed in the region recorded blue whale calls on 99.7 per cent of the days between January and December in 2016.

The researchers say their new findings, published today in the journal *Endangered Species Research*, were particularly important as the Government recently issued its first permit for mining the seabed for iron sands, and the area was also currently used for oil and gas extraction.

"We had five hydrophones deployed for two years in the STB and we never heard any Australian blue whale calls – just the local New Zealand population," said Leigh Torres, a principal investigator with Oregon State University's Marine Mammal Institute and co-author on the study

"When we conducted biopsies of individual whales, we also discovered that they are genetically distinct from other blue whale populations."

This journey of discovery began in 2011 when a colleague told Torres that observers aboard seismic survey vessels had spotted nine blue whales.

Torres thought it was unusual, and began looking at whaling records, which suggested the South Taranaki Bight region historically was a minor "hotspot" for blue whale activity.

She then assessed oceanographic patterns and found documentation of local upwelling that "supports aggregation of a certain krill species that blue whales like to eat".

In 2013, Torres wrote a paper that hypothesised whales may use this region because of a steady food supply.

She said she received pushback from industry, resource managers and even other scientists because the blue whale is listed as a "migrant" by the New Zealand Threat Classification System.

So in 2014 she led a 10-day research expedition looking for blue whales to see if they were foraging in the area and during that study she and her colleagues identified roughly 50 blue whales.

That led to more questions, including whether the whales were part of a migratory population from, say, Australia, or were potentially a distinct New Zealand population.

Torres and her graduate student, Dawn Barlow, led longer surveys in the summers of 2016 and 2017, trying to determine the abundance, distribution patterns and population structure of the New Zealand blue whales.

They used biopsy darts to determine the genetics of the whales, compared sightings with photo IDs of

The researchers were able to identify 151 individual New Zealand blue whales between 2004 and 2017 by examining various photographic evidence. (Credit: Oregon State University).

whales from other regions, and listened to the hydrophones deployed in the region for two years.

They were able to identify 151 individual New Zealand blue whales between 2004 and 2017 by examining various photographic evidence and then used that and other data to estimate their overall abundance.

"There is no doubt that New Zealand blue whales are genetically distinct, but we're still not certain about how many of them there are," Barlow said.

"We have generated a minimum abundance estimate of 718, and we also were able to document eight individuals that we re-sighted in multiple years in New Zealand waters, including one whale seen in three of the four years with a different calf each time, and many others we saw at least once."

Torres said the OSU researchers are "working closely with resource managers in New Zealand to help them understand what we do and don't know about this New Zealand blue whale population so they can apply best management practices to minimise impacts from industry".

"While we have gained a great amount of information about blue whales in New Zealand over the past few years, we continue to analyse our data and do more research to address other knowledge gaps."

The blue whales found off New Zealand, Australia and Chile are not quite as large as Antarctic blue whales, which scientists believe to be the largest animals to have ever lived on Earth.

Antarctic blues, when they reach adulthood, can range from 28 to 30 metres in length.

The other blue whales, though slightly smaller, are still formidable at about 22m.

The US researchers will return in July and meet with government and political leaders, as well as industry representatives.

They also are presenting their data to the International Whaling Commission.

The study was supported by numerous groups, including The Aotearoa Foundation and Department of Conservation.

Other authors on the study were from Cornell University, the University of Auckland, DoC, Australian Marine Mammal Centre, Blue Whale Study, Inc, and Massey University.

https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12053890

Where Salmon, Recreational Fishing Will Be Closed to Boost Orcas

By Lindsay Kines

Jun. 2, 2018 — Federal officials have shut down salmon and recreational fishing for the summer in key feeding grounds for killer whales.

The closures, which took effect Friday, apply to parts of the southern Gulf Islands, portions of Juan de Fuca Strait, and areas around the mouth of the Fraser River. It's the latest move by the Department of Fisheries and Oceans to protect the endangered southern resident orca population by conserving their favourite food — chinook salmon.

"Wild populations of chinook salmon have declined dramatically in recent years," the department says. "This lack of prey has been a critical factor in the decline of southern resident killer whales."

The population has dwindled to 76 whales and federal Fisheries Minister Dominic LeBlanc recently stated that the species faces "an imminent threat to its survival and recovery."

In response, the department announced a plan last week to reduce the coast-wide harvest of chinook by 25 to 30 per cent this year.

Few details were released at the time, but the department now confirms that recreational fishing and commercial salmon fishing will be closed until Sept. 30 in parts of Juan de Fuca Strait off Vancouver Island west of Otter Point, and in the waters south of Galiano Island around Mayne, Saturna and Pender islands.

New catch limits for chinook will take effect in other regions.

Rebecca Reid, regional director general for DFO, said the closures will make more chinook available for the whales and allow them to hunt in peace without

being disturbed by commercial and recreational fishing boats.

She said the strategy has the added benefit of potentially helping both the whales and the salmon.

"We have significant conservation concerns for chinook in addition to our concerns about southern resident killer whales," she said.

"So any fish that aren't caught by the whales will be able to get back to their streams and spawn, which will be beneficial as well.

"It's kind of a dual strategy: Make them available and if they're not harvested by the whales, allow them to return to spawn."

Owen Bird, executive director of the Sport Fishing Institute of B.C., expressed disappointment with the extent of the closures and the absence of other strategies to protect chinook and whales.

He said the federal plan ignores the effect of boat traffic, noise and pollution on the health of killer whales. Officials should also be looking at efforts to build chinook stocks and investigating the impact of seals and sea lions in the Strait of Georgia.

"In isolation, to just stop recreational fishing in those areas, will do precious little for the killer whales and very little for chinook," he said.

"What we've got is a situation where it may look good to the casual observer, but in fact it is tremendously damaging to small communities, to business, to the sport-fishing community generally."

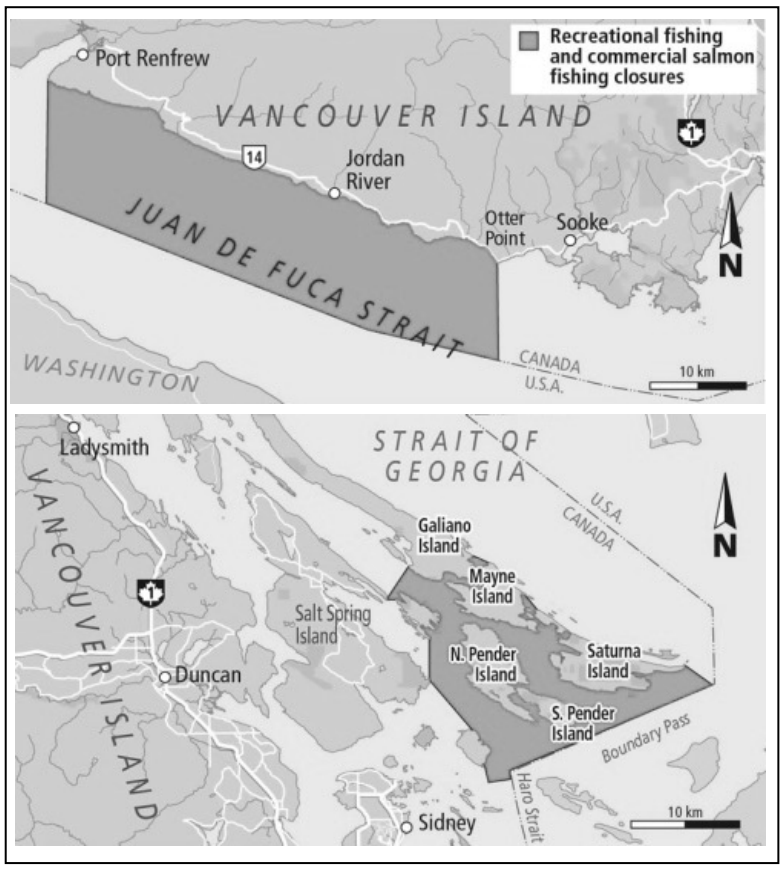
Christianne Wilhelmson, executive director of the Georgia Strait Alliance, agreed that more needs to be done, but she said the fishing closures are a welcome first step.

"Hopefully, this will help," she said. "This is going to have to be, in our opinion, an ongoing thing. This is not something that will be solved in one summer."

She echoed Bird, however, in calling on the government to deal with other issues, as well.

"We agree that we need to see action on disturbance," she said. "There has to be more restrictions on whale-watching. We have to have better rules and education for recreational boaters. We also have to see some changes from the big ship community, because noise in the strait is also [an issue]."

http://www.timescolonist.com/news/local/where-salmon-recreational-fishing-will-be-closed-to-boost-orcas-1.23322813



This Huge, Ancient Whale Would Have Ripped You to Shreds

By Rafi Letzter

May 10, 2018 — This ancient, gummy whale is breaking all the rules.

The weird marine beast, called *Llanocetus denticrenatus*, lived about 34 million years ago. It was big. It was an early ancestor of modern humpbacks and blue whales. And (this is the maverick, rule-breaking bit for a whale of its type) it had thick gums studded with teeth.

Today, all the biggest whales are filter feeders, while only small whales of the odontocetl group (including belugas, sperm whales, and all dolphins and porpoises) still chew their food.

Modern large whales instead suck huge volumes of water through stringy bristles in their mouth called baleen, separating out tons of tiny organisms, which they digest en masse. This is such an essential feature of the group of massive whales, or Mysticetes, to which *L. denticrenatus* also belongs, that biologists call whales in this group baleen whales.

But *L. denticrenatus*, according to a paper published today (May 10) in the journal Current Biology, didn't have any baleen.

This is an artist's reconstruction of *Llanocetus denticrenatus*, an ancient whale with teeth. (Credit: Carl Buell).

After the flesh of ancient creatures has long rotted away, it can be tricky to determine what these animals looked like when they were alive. But researchers studied a remarkably complete *L. denticrenatus* skull found in Antarctica and were able to make some judgments about the flesh it likely supported, based on its ridges, grooves, and holes for blood vessels and nerves.

L. denticrenatus, they found, did have large gums, which included some signs of features that may have preceded baleen. But those gums were studded with teeth — the sort of teeth creatures use to take bites out of one another.

That's bizarre, because *L. denticrenatus* was also huge, growing to be up to 26 feet (8 meters) long, according to researchers. And, as Live Science previously reported, researchers have long believed that only filter-feeding whales could grow larger than about 20 feet (6 m).

"The giants of our modern ocean may be gentle, but their ancestors were anything but," study author Felix Marx, a paleontologist at the Royal Belgian Institute of Natural Sciences, said in a statement. "*Llanocetus* was both large and a ferocious predator and probably had little in common with how modern whales behave."

This finding also reverses the order researchers had long assumed for whale evolution. *L. denticrenatus* may have been what researchers call a "suction-assisted raptorial feeder" — a big animal that sucks smaller animals into its mouth before noshing on them — but it didn't do any filter feeding.

"Until recently, it was thought that filter feeding first emerged when whales still had teeth," researcher R. Ewan Fordyce, a paleobiologist at the University of Otago in New Zealand, said in the same statement. "*Llanocetus* shows that this was not the case."

https://www.livescience.com/62537-whale-tooth-filter-feeding.html

SIGHTINGS

Sightings are compiled by Monterey Bay Whale Watch. For complete listing and updates see *http://www.montereybaywhalewatch.com/slstcurr.htm*

Date	#	Type of Animal(s)
5/31 9 am	4	Humpback Whales
5/30 9 am	7	Humpback Whales
	3	Bottlenose Dolphins
	3	Harbor Porpoise
	1	Black-footed Albatross
5/29 9 am	11	Humpback Whales
	10	Harbor Porpoise
5/28 11 am	2	Humpback Whales
	10	Pacific White-sided Dolphins
	5	Harbor Porpoise
	1	Mola Mola (ocean sunfish)
	2	Black-footed Albatross
5/27 1 pm	9	Humpback Whales
	3	Blue Whales
	3	Pacific White-sided Dolphins
5/26 8 am	8	Humpback Whales
	10	Pacific White-sided Dolphins
	45	Risso's Dolphins
	1	Black-footed Albatross
5/25 1 pm	3	Humpback Whales
	1	Northern Fur Seal
5/24 8 am	10	Humpback Whales
	20	Risso's Dolphins
	8	Harbor Porpoise
5/23 9 am	7	Humpback Whales
	18	Risso's Dolphins
	8	Harbor Porpoise
5/22 9 am	8	Humpback Whales
	30	Risso's Dolphins
	15	Harbor Porpoise
	5	Black-footed Albatross
5/21 9 am	12	Humpback Whales
	300	Pacific White-sided Dolphins
	100	Risso's Dolphins
	15	Harbor Porpoise
	17	Black-footed Albatross
5/20 8 am All Day	12	Humpback Whales
	140	Risso's Dolphins
	8	Harbor Porpoise
5/19 9 am	19	Humpback Whales
	4	Gray Whales
	60	Pacific White-sided Dolphins
	80	Risso's Dolphins

	1	Black-footed Albatross
5/18 8 am All Day	14	Humpback Whales
	250	Pacific White-sided Dolphins
	300	Risso's Dolphins
	100	Northern Right-whale Dolphins
5/17 9 am	13	Humpback Whales
	300	Pacific White-sided Dolphins
	10	Harbor Porpoise
5/16 2 pm	11	Humpback Whales
	10	Risso's Dolphins
	20	Harbor Porpoise
5/15 9 am	7	Humpback Whales
	2	Fin Whales
	500	Pacific White-sided Dolphins
	15	Risso's Dolphins
	3	Blue Sharks
5/14 8 am	40	Humpback Whales
	350	Pacific White-sided Dolphins
	100	Northern Right-whale Dolphins
	40	Risso's Dolphins
	100	Harbor Porpoise
	2	Black-footed Albatross
5/13 8 am	7	Humpback Whales
	7	Killer Whales
	40	Pacific White-sided Dolphins
	60	Risso's Dolphins
	40	Harbor Porpoise
	1	Blue Shark
5/12 9 am	6	Humpback Whales
	1	Gray Whales
	16	Pacific White-sided Dolphins
	200	Risso's Dolphins
	2	Harbor Porpoise
5/11 8 am All Day	24	Humpback Whales
	20	Fin Whales
	200	Pacific White-sided Dolphins
	600	Risso's Dolphins
5/10 9 am	12	Humpback Whales
	4	Fin Whales
	35	Risso's Dolphins
	2	Harbor Porpoise
	5	Black-footed Albatross
5/9 8 am	4	Humpback Whales
	2	Gray Whales
	90	Risso's Dolphins
	2	Black-footed Albatross
5/8 9 am	39	Killer Whales
	8	Humpback Whales
	1	Black-footed Albatross
5/7 8 am	25+	Killer Whales
	6	Humpback Whales
	150	Risso's Dolphins
	20	Pacific White-sided Dolphins
	2	Harbor Porpoise
	1	Black-footed Albatross
5/6 8 am	11	Killer Whales
	18	Humpback Whales
	200	Pacific White-sided Dolphins
	1	Long-beaked Common Dolphin
	400	Risso's Dolphins
	60	Black-footed Albatross

5/5 8 am	13	Killer Whales
	13	Humpback Whales
	200	Pacific White-sided Dolphins
	315	Risso's Dolphins
	15	Black-footed Albatross
5/4 8 am All Day	4	Killer Whales
	20	Humpback Whales
	200	Pacific White-sided Dolphins
	150	Risso's Dolphins
5/3 9 am	11	Humpback Whales
	700	Pacific White-sided Dolphins
	600	Risso's Dolphins
	1	Elephant Seal
	1	Blue Shark
	9	Black-footed Albatross
5/2 9 am	10	Killer Whales
	4	Humpback Whales
	50	Risso's Dolphins
	4	Blue Sharks
	6	Black-footed Albatross
5/1 9 am	32	Humpback Whales
	200	Risso's Dolphins

Risso's Dolphin playing with kelp on May 27, 2018.
(Credit: Daniel Bianchetta).

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