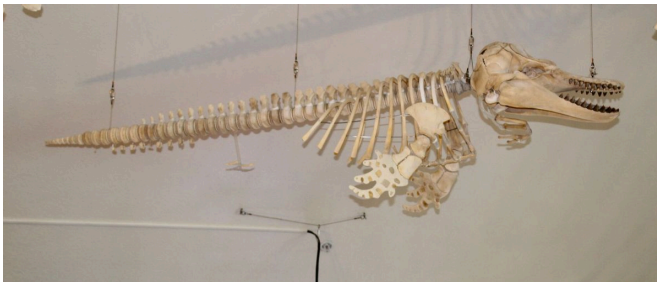


Photos / Life After Death: Deceased infant orca now contributing to science

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A deceased newborn orca that washed ashore on a beach in Brookings six years ago is now contributing to marine education through a local exhibit at the Charleston Marine Life Center.

The six-foot long baby orca skeleton was placed alongside a full-grown female orca skeleton. The two marine mammals are now “swimming” together and greeting visitors as they enter through the doors of the Charleston Marine Life Center.

The CMLC is the public outreach center of the Oregon Institute of Marine Biology, the University of Oregon’s marine biology research and teaching field station.

Shortly after the infant orca was found, scientists performed a necropsy to find out how it died. They found that the newborn orca had air in its lungs, but it did not have any milk in its stomach. They hypothesize that the orca got separated from its mother shortly after birth, and that it was about two days old when it died.

After the necropsy, scientists decided to preserve the skeleton so others could learn more about the difference between adult and baby orca skeletons. It took a team of marine biologists and community and student

volunteers about 5-years to complete the process of decomposing and then piecing together the whale skeleton for the exhibit.

“It is not common to have a baby orca skeleton – and baby skeletons are different from adult skeletons – so this was a very important opportunity to learn about what newborn whale skeletons look like,” said Trish Mace, the director of the Charleston Marine Life Center.

It was a time-consuming process, not only because orca skeletons contain many bones, but also because infant whale skeletons aren’t fully formed, Mace said.

Figure out as you go process

There was no simple blueprint to follow.

Nancy Treneman, a research associate and instructor at OIMB, took the lead in recreating the skeleton. The infant cetacean was still in the process of developing its bones so many were still cartilage and had not yet ossified, she said.

She and her team used epoxies and acrylics to fill in the blank spaces that were cartilage. Also, because the infant whale bones were so small compared to an adult, it took some creativity to fuse the delicate pieces together and support the skeleton.

In some ways it was a figure-it-out as you go process, Treneman said. But the meticulous team took their time to do it as accurately as possible.

While the death of an infant whale isn’t something anyone wants to see, the silver lining is that many have already learned and will continue to learn from it.

“Orcas, it seems, are everybody's favorite marine mammals. They are romanticized in some ways. But they're also a top apex predator in the ocean. They have no natural predators. They are really intelligent and they’re social,” Treneman said.

There is still a lot to learn about orcas, so it is special to be able to give visitors to the Marine Life Center an up-close view of the skeleton, she said.

Impressive collection

The orca exhibit now adds to the impressive collection of exhibits at the Charleston Marine Life Center.

The center is part museum, part aquarium, and is open to the public Wednesday through Saturday from 11 a.m. to 5 p.m. Children and students are free, adults are \$5 and senior entry is \$4. It is located at 63466 Boat Basin Rd in Charleston.

When the CMLC is not open to the public, it is utilized for school groups and other educational activities.

“For locals who come in, they are getting to know their own backyard, in essence,” Marine Life Center director Mace said.

“I think we have a lot more diversity of marine life here than most people realize,” she said.

Exhibits at the marine life center include tanks that hold live sea creatures, fish and other marine life that have been preserved, as well as sea turtle and marine mammal skeletons. There are also many interactive exhibits and views of the Charleston Marina and the bay.

It is illegal to collect marine mammal bones without a permit. If anyone comes upon a stranded marine mammal, dead or alive, they should report it the West Coast Marine Mammal Stranding Network Hotline at 1-866-767-6114.

More information about the Charleston Marine Life Center can be found at cmlc.uoregon.edu.

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