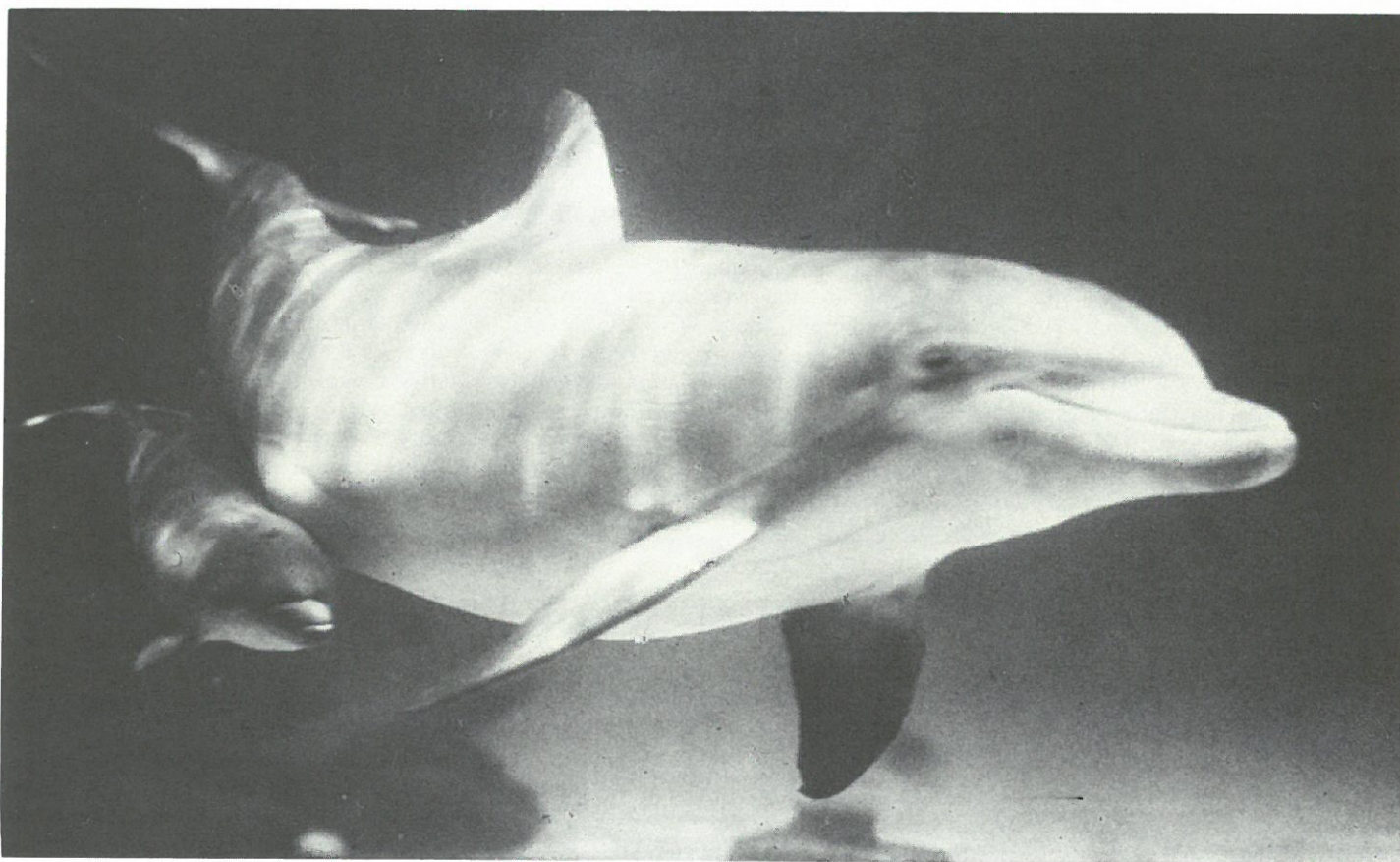


COAST WATCH



Atlantic bottlenosed dolphin and calf

Mammals of the sea

Millions of years ago, they emerged from the sea as amphibians and made the land their home. These fish-like creatures who roamed the earth on four legs evolved into mammals, air-breathing and warm-blooded. They bore their young alive and nursed them. Then, over 50 million years ago, some of them returned to the water as mammals and took the rivers, sounds and open ocean for their home.

Marine mammals underwent many changes to adapt to a watery environ-

ment. Their front legs became flippers, and their rear legs disappeared with only small traces of bone remaining in the skeletal structure. Bodies became more streamlined, reducing turbulence and resistance when they moved through the water. Blowholes on the top of the head allowed them to breathe while swimming. They came to resemble large fish, but they were true mammals.

Today there are three groups of marine mammals: cetaceans (whales,

dolphins and porpoises); pinnepids (seals, sea lions and walruses) and sire-nians (dugongs, sea cows and manatees). Marine mammals range in size from the blue whale (about 90 feet in length) to the harbor porpoise (about five feet long). Some species, such as the manatee and bottlenosed dolphin, live close to shore while most of the big whales live 30 miles offshore or even farther.

Continued on next page

"North Carolina has an extremely impressive array of marine mammals because of latitude," David Lee says. Lee is the curator of birds and mammals at the North Carolina State Museum of Natural History in Raleigh. He says the state's waters have some species that are migratory, some that are permanent residents, and some that reside here only in winter or in summer.

"It wouldn't be accurate to list species native to the state," Lee says, "because many are migratory. Besides, they live underwater and we can't see them, so we don't know much about them." (See page 6 for a list of marine mammals reported in the state.)

The manatee is one species that has managed to go unsighted in recent years. Historical reports as late as the early 1900s indicated that the manatee regularly migrated to the southern coast of North Carolina from Florida during the summer. But heavy exploitation of the meat, especially during the Depression, drastically reduced the population. Lee says there are now about 1,000 manatees left in the United States, placing the species on the endangered list and under federal protection.

"During the summers of '75 and

'76," Lee says, "we (the museum) participated in a cooperative program with the U.S. Fish and Wildlife Service to determine the current status of the animal in North Carolina. We postulated that manatees still occurred in lower numbers in the Cape Fear estuary and in even lower numbers a little further north, like Beaufort." Information resulting from the search indicates that this marine mammal may still occur in the state's waters from June to early October, but no population estimates have been made.

Sightings of manatees aren't easy to come by because the animals frequent the murky waters found in estuaries and along the shore. "The last documented manatee (outside its native Florida waters) was found dead in the Chesapeake Bay," Lee says. "It swam through North Carolina waters, but no one saw it. They are just so hard to see in the water, and then they only stick their noses up for air. Most people aren't even aware that they could be out there."

There are approximately 30 species of marine mammals that have been reported in the state's waters, according to Lee. Some species, like the northern hooded seal, are rare here, while harbor seals occur regularly

along shore. Chances of seeing the big whales offshore are very limited though. "You might see some pilot whales and dolphins," Lee explains, "but even in a big boat offshore, you can't cover that much ocean, and the water is often too rough to see. Our knowledge of abundance of these mammals is based on what we do see and what gets stranded."

Scientists here and around the world are trying to uncover more information about the species and populations of marine mammals. Many of these populations have declined. Gone are the days of big whaling camps along the Outer Banks and New England. The International Whaling Commission, which was formed in 1946, has in recent years lowered kill quotas of some species and put bans on killing other species.

In the United States, all marine mammals come under the jurisdiction of the federal Marine Mammal Protection Act of 1972, and the manatee is further protected by the Endangered Species Act of 1975. While scientists aren't expecting populations to completely recover, they are trying to ensure that enough mammals survive to keep the species and research alive.

—Cassie Griffin

Strandings: A source of data, a biological mystery

There are huge gaps in man's knowledge of marine mammals. These diverse and mysterious sea creatures spend most of their lives underwater, making observations and most standard research work difficult.

Oddly enough, the bulk of information available on marine mammals comes from dead specimens, not living ones. Scientists study strandings to learn about feeding habits, the rates and causes of natural mortality, breeding and populations. Skeletons, brains, and other valuable parts of the animal are preserved for research.

The first studies of marine mammal strandings took place at the Smithsonian Institution in Washington, D.C. Whale scientist Frederick W. True circulated a letter to lighthouse keepers, light stations and lifesaving stations asking them to notify him of strandings. True kept records of this information and, when he could, salvaged the remains for his research.

His work lasted from the early 1880s until 1914.

From 1914 until 1972, data on strandings was collected only in bits and pieces by zoologists and universities with an interest in marine mammals. In 1972, James Mead, curator of the Division of Mammals at the Smithsonian, set up the Marine Mammal Salvage Program.

"The program has two aspects," Mead says. "First, we set up a network of people who have regular access to the coast, and we got them to call us with notification of a stranding. Secondly, we developed a way to go and get data from the animals, which provides a source of data for research and for the museum's collection."

In the beginning, the program covered strandings from Cape Cod to Charleston, South Carolina. In recent years, four active organizations have picked up most of the work north of Washington, D.C. and the program

now concentrates its work force of two (Mead and Charley Potter) on Maryland, Virginia and the North Carolina coast as far south as Ocracoke. (David Lee of the State Museum of Natural History is responsible for compiling records on the remaining coastline.) Potter and Mead say they will travel anywhere in the world, though, for a rare species.

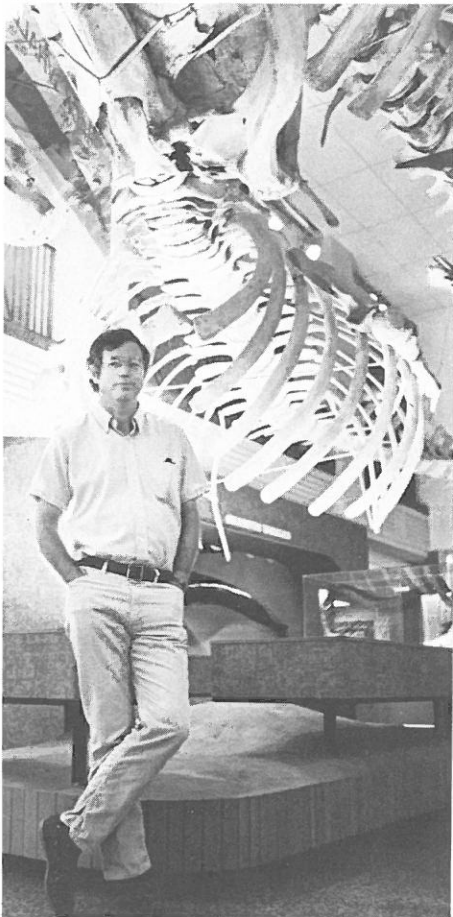
Mead, who has personally covered 400 of the 1,500 strandings since the program began, has been collecting theories on why marine mammals strand. One of the first big theories involved worms in the mammal's ear. Because marine mammals depend on sound for determining sense of direction, it was thought that the worms caused the mammals to stray off course and strand. This theory lost credence when later strandings revealed no worms present in the mammals. Mead says that some people also believe that since cetaceans were

derived from land animals, there is a subconscious behavioral pattern to return to the land and lie down to rest.

Another theory deals with continental drift. Scientists postulate that cetaceans have in their subconscious some memories of past migration routes. When put under any kind of stress, those memories surface, and the marine mammals try to follow a path that would have been open 10 million years ago. But now it is blocked by a continent.

However, Mead thinks a more plausible and simple explanation for the strandings is not a single reason, but a combination of reasons. Animals are led out of their normal distribution pattern and put under some kind of stress. "I feel that a marine mammal is not used to physical barriers," Mead says. "They don't understand that the ocean has sides and a bottom. They just don't recognize the beach as a barrier that will impede them." Mead says more information is really needed on what caused the animals to diverge

Photo by Cassie Griffin



David Lee and sperm whale skeleton in the museum

from their normal patterns in the first place.

Research has provided some insights into strandings. Lee says individual strandings usually involve sick, injured, tired and weak specimens that are brought in by the current. "Sometimes a porpoise and her calf will strand together," he says, "because one is sick and the healthy one is staying with the other."

Mass strandings seem to be more

preserved for future research. It's not a job for the weak or those with weak stomachs. "Once when we were salvaging a thirty-foot, small humpback," Lee recalls, "it took six of us, after we cut off a fin, to lift it and put it in the truck. That fin was big and slimy with no handles." After data are collected, carcasses are either buried or towed out to sea for disposal.

Al Swanson, a taxidermist from Powell's Point, is one of the authorized

"We know very little about them biologically—when they reproduce, when they migrate, how fast they grow, how long they live. Even on the most common species, the specimens are valuable."

—David Lee

complex and can involve from several to several hundred animals. Such strandings may result from a reaction to fear, bad weather conditions, herd diseases or physiological problems that reduce the animals' effectiveness and survival. Potter says there is a tight social bond among members of species that strand in masses, and that mass strandings can be triggered by a catastrophic event in which species follow the leader of the herd. "Mass strandings also involve primarily offshore species," he says, "such as pilot whales, killer whales, sperm whales, rough-toothed dolphins and many-toothed blackfish."

Pilot whales were the victims of the last big stranding in North Carolina. In October 1973, 50 of the whales, averaging 17 feet in length, stranded at Cape Lookout. Cape Hatteras is known as the "Graveyard of the Atlantic" for whales as well as vessels, according to Lee. Strong currents can trap weakened or confused animals, which end up on the Outer Banks.

In a given year, Lee says, they record 30 to 250 strandings. "The reason the number varies," he says, "is because strandings vary from year to year and the reporting input varies. Probably less than thirty percent of all strandings get reported."

So, what happens to the stranded marine mammal? Depending upon the species, staff from the Smithsonian, the state museum or area contacts with authorization will go down to the beach and survey and record the event. Autopsies may be performed and the carcass stripped and parts

area contacts Lee calls to check out strandings on the Outer Banks. He goes down to the beach, gathers the basic data on the animal and calls in the report to Lee, who may ask Swanson to freeze the carcass until he can get down to see it. But, Swanson has another role in the salvage program.

"If it's a species the museum needs," he says, "I will make a fiberglass casting of it with the same techniques I use to make reproductions of saltwater sport fish." In the past two years, he has made castings of a harbor porpoise, a pilot whale, a bottlenosed dolphin and male and female grampus, which are hanging in the museum.

Lee says it is important to have specimens preserved in some manner. "We like to make sure the specimen ends up in an appropriate place, such as teaching collection at a college or university, an exhibit in a marine resources center, the Smithsonian or the museum here," he says. "It's important that the animal and its parts get saved, so that later, when someone wants to study them, they know where they can find, say, fifteen specimens of pygmy sperm whale females collected in January. Even the most common species, we know very little about them, biologically—when they reproduce, when they migrate, how fast they grow, how long they live—things like that. Even on the most common species, the specimens are valuable."

Or, as Charley Potter explains, "That's why we spend so much time mucking around in these carcasses."

—Cassie Griffin

If you find a stranded marine mammal . . .

Photo by Hilda Livingstone



Grampus stranding at Nags Head Beach, February 1981

Fact: There is a marine mammal stranding along the North Carolina coast nearly every week. While the bottlenosed dolphin is the most common species, whales occasionally wash up, and, even less frequently, a seal or two. Stranded animals may be alone or in a group, dead or alive, but most still provide valuable sources of information in marine mammal biology. What do you do if you find a stranded marine mammal?

First, you should be aware that marine mammals come under the jurisdiction of the federal Marine Mammal Protection Act of 1972. Under its provisions, it is unlawful for anyone without a permit to handle, harass or possess any marine mammal, dead or alive, and there are stiff fines and possible imprisonment for violators. Agencies or institutions with legal responsibility should be notified. David Lee of the State Museum of Natural History and Charley Potter of the Smithsonian Institution's Marine Mammal Salvage Program suggest the following steps:

What is it? _____

Before you notify the authorities, gather as much information as possible on the stranding without handling the animal. Is it a shark or a mammal? Sharks have vertical tail fins, and whales have horizontal tail fins. Is it a mass or individual stranding? Is it a seal, manatee or whale (including dolphins and porpoises)? Is it a toothed whale or a baleen whale? Toothed whales have a single blowhole; baleen whales have two. If it is a toothed whale, how many teeth are present on the upper and/or lower jaw? (Do not attempt this search if the animal is still alive.) What is the shape of the head? Are there any obvious color markings? Estimate the length either by measuring or by walking off the length of the animal. For seals, note color and texture of fur or hair, presence or absence of external ear flaps and length of the animal. Finally, is the animal dead or alive?

David Lee, who is working on a book now with James Mead on marine mammals and strandings in North Carolina, suggests estimating the length as closely as possible. "If it's over a certain number of feet, we can

immediately rule out that it's a bottlenosed porpoise, which is the most common stranding," he says. "If you knew the length and reported whether it had teeth or not, and then if you really had time and could count how many teeth it had and which jaws they were in, we could probably guess within one or two species what it is. And, if we knew the color, we could probably rule out one of those and make an intelligent guess."

Where is it? _____

It is extremely important to deter-

mine the exact location of the stranding site. When calling to report a stranding, be sure to describe the location so accurately that someone can find it, even in the dark if necessary. Precious hours may be lost if the location is not accurately pinpointed. How accessible is the stranding site? Is a boat necessary or can it be reached by a four-wheel-drive vehicle or an ordinary car?

Whom do I call? _____

There are biologists, government agencies and knowledgeable contact

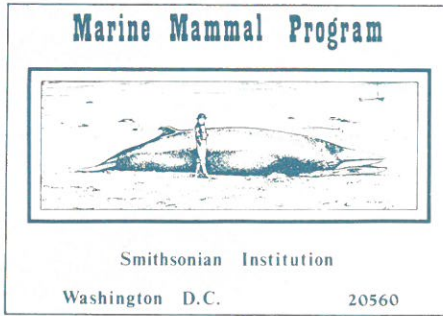
people designated as part of a network to cover strandings along the North Carolina coast. Whom you call depends on where you are. The beaches of Cape Hatteras National Seashore, Pea Island National Wildlife Refuge, and Cape Lookout National Seashore are under federal jurisdiction. Contact the park service staff immediately at these telephone numbers with the information you have gathered on the stranding: Cape Hatteras (919) 473-2117, Pea Island (919) 987-2394 and Cape Lookout (919) 728-2121.

If the stranding is on state property, contact the National Marine Fisheries Service (NMFS) office in Morehead City at (919) 728-4595. NMFS is the government agency with legal authority over marine mammals.

The Southeastern United States Marine Mammal and Sea Turtle Salvage Network notifies area agencies and biologists for every stranding reported to their toll-free number: 1-800-327-6545.

While it is important to contact the Smithsonian Institution's Marine Mammal Salvage Program, Potter suggests you first contact agencies closest to the stranding site as they are in a better position to take immediate

action. These agencies will contact the Smithsonian at the first chance. The telephone number for the salvage program is (202) 357-1920.



If, for some reason, you have not been able to reach any of the agencies listed above, call the Coast Guard, state Division of Marine Fisheries, local police department or county sheriff, wildlife department, local Marine Resources Centers (Fort Fisher (919) 458-8257, Bogue Banks (919) 726-0121 and Roanoke Island (919) 473-3493), universities or colleges, area humane society or the Society for the Prevention of Cruelty to Animals.

Remember to leave your name and phone number in case the agencies you have called need to reach you for more details on the stranding.

What to do until help comes —

In the event that nobody is able to respond immediately, follow any instructions given by telephone. The following steps should also be taken:

If the animal is still alive, be cautious for your own protection. Live animals should be kept wet and protected from the sun. Cover with wet blankets, but keep the blowhole area open. If there is sun, shade the animal with a lean-to made of driftwood, towels or any other material that is handy. Ice packs may be applied to flippers, dorsal fins and flukes to help prevent overheating. Do not try to move stranded marine mammals, either dead or alive. And, above all else, protect the animal from harassment or mutilation by other animals or by crowds.

David Lee offers a warning and a bit of common sense tempered by experience in dealing with marine mammal strandings: "Almost all marine mammals that are on the beach are going to die in spite of what you do for them. And, if you lug them out to sea, you're just prolonging their agony, and they're just going to wash up someplace else."

A museum specimen

In 1928, a 55-foot sperm whale stranded at Wrightsville Beach. It took seven people seven days to flesh down the carcass and bury it. After a year, the skeleton was unearthed and transported to Raleigh where the bones were spread out on the roof of the Agriculture Building to bleach in the sun. Many months and staff hours later, the skeleton was put back together and hung in the museum where it has been on exhibit for 50 years.

Photos courtesy of the N.C. State Museum of Natural History

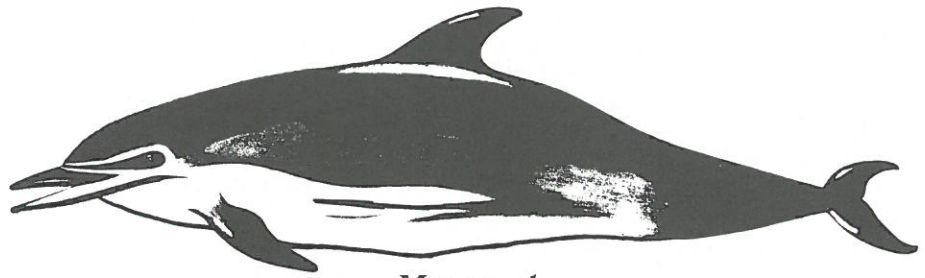


Dolphin Or porpoise?

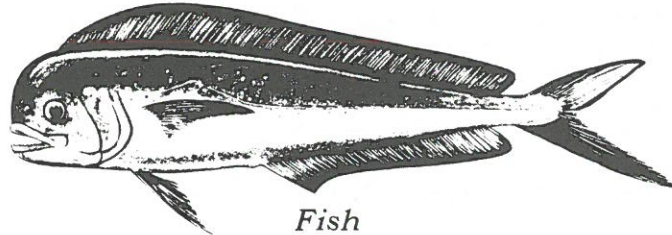
There has been a small controversy going on in the scientific world for years. Dolphin or porpoise . . . which word do you prefer to use when referring to the small marine mammal?

Basically, all cetaceans are whales, though "whale" most commonly refers to the large species. Some scientists argue that the term "porpoise" should be used for all small whales. Others use "porpoise" only for members of the family *Phocoenidae* and "dolphin" for those cetaceans of the family *Delphinidae*. Common names may vary from locale to locale and from one scientist to another, but the two families are very much alike.

To add to the confusion of names, there is also a marine fish, from the genus *Coryphaena*, known as the dolphin. This fish, which is often caught off the North Carolina coast, grows to a length of six feet and usually stays close to the surface in tropical and sub-tropical seas. The male has a high, bulgy forehead, like



Mammal

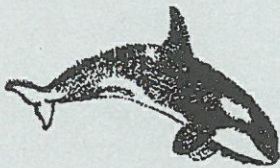
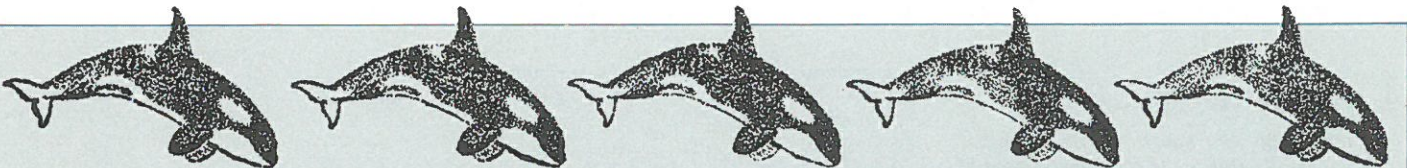


Fish

some cetaceans. However, unlike the air-breathing mammals called dolphins, the fish is completely aquatic and gets its oxygen from the water with gills. The mammal dolphin is warm-blooded while the dolphin fish is cold-blooded. In addition, the tail fins of marine mammals are horizontal; those of all fishes are vertical.

Frank Schwartz, a marine biologist at the University of North Carolina

Institute of Marine Sciences in Morehead City, has his own solution for naming the fish and mammals. "If I use the word dolphin, I think of the fish, being a fish man," he says. "If you say porpoise, I know you're talking about a mammal. But, when you say dolphin, I have to ask if it's a fish or mammal to sort them out. Neither is incorrect," he explains, "it's just a matter of personal preference."



Marine Mammals Reported In N.C. Waters

Atlantic Right Whale
Finback Whale
Humpback Whale
Sei Whale
Sperm Whale
Atlantic Beaked Whale
Gervais' Beaked Whale

Goosebeak or Cuvier's Beaked Whale
True's Beaked Whale
Atlantic Blackfish or Pilot Whale
Short-finned Blackfish or Pilot Whale
Grampus or Risso's Dolphin
Atlantic Killer Whale
False Killer Whale
Florida Manatee
Minke Whale
Atlantic Bottlenosed Dolphin
Atlantic Harbor Porpoise
Common or Atlantic Dolphin
Cuvier Dolphin
Rough-toothed or Longbeak Dolphin
Pygmy Sperm Whale
Spinner Dolphin
Spotted Dolphin
Striped Dolphin
Harbor Seal
Hooded Seal

Eubalaena glacialis glacialis Muller
Balaenoptera physalus Linnaeus
Megaptera novaeangliae (Borowski)
Balaenoptera borealis Lesson
Physeter catodon Linnaeus
Mesoplodon densirostris (Blainville)
Mesoplodon europaeus Gervais
(= *M. gervaisi* (Deslongchamps))
Ziphius cavirostris G. Cuvier
Mesoplodon mirus True
Globicephala melaena melaena (Traill)
Globicephala macrorhyncha (Rice)
Grampus griseus G. Cuvier
Orcinus orca Linnaeus
Pseudorca crassidens Owen
Trichechus manatus Linnaeus
Balaenoptera acutorostrata Lacepede 1804
Tursiops truncatus truncatus (Montagu)
Phocoena phocoena Linnaeus
Delphinus delphis delphis Linnaeus
Stenella frontalis G. Cuvier
Steno bradanensis Lesson
Kogia breviceps (Blainville)
Stenella longirostris (Gray)
Stenella plagiodon (Cope)
Stenella ceruleoalba Meyer
Phoca vitulina concolor DeKay
Cystophora cristata (Erxleben)

THE BACK PAGE

"The Back Page" is an update on Sea Grant activities—on research, marine education and advisory services. It's also a good place to find out about meetings, workshops and new publications. For more information on any of the projects described, contact the Sea Grant offices in Raleigh (919/737-2454).



Students in a design class at NCSU have spent the summer grappling with a tough problem: How do you convince picky eaters to try unusual seafoods?

In a summer studio class conducted by associate professor Austin Lowery, the students have designed logos, advertisements, posters and even T-shirts as part of a "campaign" to promote five under-used North Carolina seafoods—shark, squid, eel, skate and ray.

The project, which was organized by Lowery and Neil Caudle, Sea Grant's director of communications, gives the students practice solving some practical design problems. One goal of their work is to convince their fellow students to try, say, skate creole or smoked eel. The materials will also be useful in some of Sea Grant's education programs.

The students have had help with their research. Two Sea Grant seafood experts, Joyce Taylor and Sam Thomas of the NCSU Seafood Laboratory in Morehead City, supplied the class with facts about seafood nutrition, preparation and marketing. The students even had a chance to sample their subject matter. Lundie Spence, Sea Grant's education specialist, helped them prepare shark-kabobs and fried squid. Their reaction? "Delicious!"

Want to try some unusual seafoods for yourself? Plan to be in Beaufort August 19 for the sixth annual Strange

Seafood Exhibition, held by the Hampton Mariners Museum.

This year, the exhibition will be held for three hours, from 1 to 4 p.m., at the museum's Heritage Boatshop on Turner Street, says Judith Spitsbergen, education coordinator for the museum. A \$2 admission fee will be charged to cover the cost of the seafood.

Spitsbergen says 60 to 70 volunteers from Carteret County and beyond will be cooking and serving 40 different dishes, including stingray casserole, herring roe and eggs, eel salad, fried squid and marinated octopus. Sea Grant staff at the NCSU Seafood Laboratory in Morehead City will be smoking fish or eel for the exhibition, says Sam Thomas of the lab. The plans also call for demonstrations on how to clean and prepare seafood for cooking.

All of the recipes used to cook the dishes will be included in the Strange Seafood Cookbook, which will be available at the exhibition for \$5 a copy.

Last year, 1200 to 1500 people attended the event and Spitsbergen says more are expected this year. After a national television spot featured the exhibition, calls poured into the museum for a schedule of this year's events.



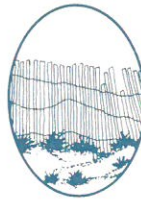
Emptying sewage may not be top priority in every boatowner's mind, but someone has to do the dirty work. To make that job easier, Sea Grant has just published a new Blueprint.

A Portable Transfer Tank for Boat Waste is designed for owners of boats with holding tanks. Although Coast Guard regulations require pumpout of this waste, very few marinas have the expensive commercial systems that can do the job. This Blueprint describes a low-cost alternative that can be put together in an afternoon for less than \$250.

Written by Spencer Rogers, Sea Grant's coastal engineering specialist, this illustrated leaflet gives a list of

materials and step-by-step instructions for constructing the transfer tank. Rogers is also the author of another Blueprint, *The \$10 Holding Tank* (UNC-SG-BP-80-1).

To obtain a free copy of *A Portable Transfer Tank for Boat Waste*, write Sea Grant. Ask for publication number UNC-SG-BP-82-1.



Every coastal dune needs roots to survive. Dune vegetation not only stabilizes the surface, it also traps new sand and puts erosion on hold. To build or repair dunes on coastal property, owners need only basic gardening tools and a little time for planting and maintenance.

Sea Grant's new publication, *Building and Stabilizing Coastal Dunes with Vegetation*, provides guidelines for property owners interested in this natural erosion-control method. Specific information is given on the five dune grasses suitable for transplanting along the North Carolina coastline—American beachgrass, bitter panicum, saltmeadow cordgrass, sea oats and seashore elder—from dates and methods for planting to disease resistance. Tips on fertilization, transplanting, maintenance and choosing the right grass for the site are also included.

Building and Stabilizing Coastal Dunes with Vegetation is written by S.W. Broome and W.W. Woodhouse, Jr. of the Department of Soil Science and E.D. Seneca of the Department of Botany at North Carolina State University. This publication is the result of research supported by the UNC Sea Grant College Program, North Carolina Agricultural Research Service and the U.S. Army Corps of Engineers. Broome, Woodhouse and Seneca are also authors of another Sea Grant publication on erosion control called *Planting Marsh Grasses for Erosion Control*.

Continued on next page

For a free copy of *Building and Stabilizing Coastal Dunes with Vegetation* (UNC-SG-82-05) or *Planting Marsh Grasses for Erosion Control* (UNC-SG-81-09), write Sea Grant, Box 5001, Raleigh, N.C. 27650-5001. Please include the publication number with your request.



It was the worst storm the trail guide had seen in 20 years of climbing Alaska's Mount McKinley. And Jim Murray was right in the middle of it. The storm

ripped his tent to shreds, forced Murray and his nine teammates into a snow cave, and almost took their lives.

Murray, director of Sea Grant's marine advisory services, likes to mix adventure with his vacations. He has climbed before—four peaks in Nepal and several others in the U.S. But McKinley proved to be his toughest climb. Measured from base to summit, it is the tallest mountain in the world.

When the storm struck on May 26, it brought temperatures in the minus 40s and winds of 100 mph. The tents took wing, and Murray and his companions spent 18 hours huddling in a snow cave they dug with their axes. Finally, the storm broke and they climbed down, cold but okay.

"It's a simpler life up there," Murray says of the climb. "Things get right down to the basics of survival. I kind of like that."

His next climb? Africa's Kilimanjaro, two years away.

More in his professional line, Murray was appointed recently to the Council of Sea Grant Directors' Task Force on Marine Advisory Services. The task force will make recommendations on Marine Advisory Services policy.

You're playing in the surf when suddenly you're swept out to sea by a rip current. What do you do?

Rip currents, which are common along some North Carolina beaches, form when water that normally moves along the shore rushes back to sea in a narrow path. These currents can extend as far as 3,000 feet offshore, reach 90 feet in width, and travel up to four feet per second, which is faster than the average swimmer.

If you find yourself caught in a rip current, don't panic and don't try to swim against the current. Swim parallel to the shore until you get out of the current and then swim back to the beach. If you can't get out, float calmly with the current until it dissipates, then swim diagonally to shore.

How do you avoid rip currents? Watch for these telltale signs: a difference in color from surrounding water, a gap in the breakers where the current is moving seaward, or a floating object that moves steadily to sea.

For a colorful poster explaining rip currents, write UNC Sea Grant, P. O. Box 5001, Raleigh, N.C. 27650-5001.

The Office of Sea Grant in Washington, D.C. has decided to no longer conduct site visits at the 16 Sea Grant College Programs. In the past, teams of experts have visited each Sea Grant program yearly or biennially, whether the program had been designated a college or not, to review proposals for funding. Now, Sea Grant Colleges will be undergoing a program review once every three to five years, and proposals will be reviewed in Washington. UNC Sea Grant is a college program and the site visit scheduled for October has been canceled.

After several rigorous reviews the 44 proposals received in May were narrowed to 20 proposals. With some revision, these proposals will be included in UNC Sea Grant's 1983-84 proposal for funding to the Office of Sea Grant later this year.

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