
A Presentation of Whales

ON THAT SECTION of the central Oregon coast on the evening of June 16, 1979, gentle winds were blowing onshore from the southwest. It was fifty-eight degrees. Under partly cloudy skies the sea was running with four-foot swells at eight-second intervals. Moderately rough. Stare police cadets Jim Clark and Steve Bennett stood at the precipitous edge of a foredune a few miles south of the town of Florence, peering skeptically into the dimness over a flat, gently sloping beach. Near the water's edge they could make out a line of dark shapes, and what they had taken for a practical

joke, the exaggeration a few moments before of a man and a woman in a brown Dodge van with a broken headlight, now sank in for the truth.

Clark made a hasty, inaccurate count and plunged with Bennett down the back of the dune to their four-wheel-drive. Minutes before, they had heard the voice of Corporal Terry Crawford over the radio; they knew he was patrolling in Florence. Rather than call him, they drove the six miles into town and parked across the street from where he was issuing a citation to someone for excessive noise. When Crawford had finished, Clark went over and told him what they had seen. Crawford drove straight to the Florence State Police office and phoned his superiors in Newport, forty-eight miles up the coast. At that point the news went out over police radios: thirty-six large whales, stranded and apparently still alive, were on the beach a mile south of the mouth of the Siuslaw River.

There were, in fact, forty-one whales—twenty-eight females and thirteen males, at least one of them dying or already dead. There had never been a stranding quite like it. It was first assumed that they were gray whales, common along the coast, but they were sperm whales: *Physeter catodon*. Deep-ocean dwellers. They ranged in age from ten to fifty-six and in length from thirty to thirty-eight feet. They were apparently headed north when they beached around 7:30 P.M. on an ebbing high tide.

The information shot inland by phone, crossing the Coast Range to radio and television stations in the more-populous interior of Oregon, in a highly charged

form: giant whales stranded on a public beach accessible by paved road on a Saturday night, still alive. Radio announcers urged listeners to head for the coast to "save the whales." In Eugene and Portland, Greenpeace volunteers, already alerted by the police, were busy throwing sheets and blankets into their cars. They would soak them in the ocean, to cool the whales.

The news moved as quickly through private homes and taverns on the central Oregon coast, passed by people monitoring the police bands. In addition to phoning Greenpeace—an international organization with a special interest in protecting marine mammals—the police contacted the Oregon State University Marine Science Center in South Beach near Newport, and the Oregon Institute of Marine Biology in Charleston, fifty-eight miles south of Florence. Bruce Mate, a marine mammalogist at the OSU Center, phoned members of the Northwest Regional [Stranding] Alert Network and people in Washington, D.C.

By midnight, the curious and the awed were crowded on the beach, cutting the night with flashlights. Drunks, ignoring the whales' sudden thrashing, were trying to walk up and down on their backs. A collie barked incessantly; flash cubes burst at the huge, dark forms. Two men inquired about reserving some of the teeth, for scrimshaw. A federal agent asked police to move people back, and the first mention of disease was in the air. Scientists arrived with specimen bags and rubber gloves and fishing knives. Greenpeace members, one dressed in a bright orange flight suit, came with a large banner. A

man burdened with a television camera labored over the foredune after them. They wished to tie a rope to one whale's flukes, to drag it back into the ocean. The police began to congregate with the scientists, looking for a rationale to control the incident.

In the intensifying confusion, as troopers motioned onlookers back (to "restrain the common herd of unqualified mankind," wrote one man later in an angry letter-to-the-editor), the thinking was that, somehow, the whales might be saved. Neal Langbehn, a federal protection officer with the National Marine Fisheries Service, denied permission to one scientist to begin removing teeth and taking blood samples. In his report later he would write: "It was my feeling that the whales should be given their best chance to survive."

This hope was soon deemed futile, as it had appeared to most of the scientists from the beginning—the animals were hemorrhaging under the crushing weight of their own flesh and were beginning to suffer irreversible damage from heat exhaustion. The scientific task became one of securing as much data as possible.

As dawn bloomed along the eastern sky, people who had driven recreational vehicles illegally over the dunes and onto the beach were issued citations and turned back. Troopers continued to warn people over bullhorns to please stand away from the whales. The Oregon Parks Department, whose responsibility the beach was, wanted no part of the growing confusion. The U. S. Forest Service, with jurisdiction over land in the Oregon Dunes National Recreation Area down to the foredune,

was willing to help, but among all the agencies there was concern over limited budgets; there were questions, gently essayed, about the conflict of state and federal enforcement powers over the body parts of an endangered species. A belligerent few in the crowd shouted objections as the first syringes appeared, and yelled to scientists to produce permits that allowed them to interfere in the death of an endangered species.

Amid this chaos, the whales, sealed in their slick black neoprene skins, mewled and clicked. They slammed glistening flukes on the beach, jarring the muscles of human thighs like Jell-O at a distance of a hundred yards. They rolled their dark, purple-brown eyes at the scene and blinked.

They lay on the western shore of North America like forty-one derailed boxcars at dawn on a Sunday morning, and in the days that followed, the worst and the best of human behavior was shown among them.

THE SPERM WHALE, for many, is the most awesome creature of the open seas. Imagine a forty-five-year-old male fifty feet long, a slim, shiny black animal with a white jaw and marbled belly cutting the surface of green ocean water at twenty knots. Its flat forehead protects a sealed chamber of exceedingly fine oil; sunlight sparkles in rivulets running off folds in its corrugated back. At fifty tons it is the largest carnivore on earth. Its massive head, a third of its body length, is scarred with the beak, sucker, and claw marks of giant

squid, snatched out of subterranean canyons a mile below, in a region without light, and brought writhing to the surface. Imagine a four-hundred-pound heart the size of a chest of drawers driving five gallons of blood at a stroke through its aorta: a meal of forty salmon moving slowly down twelve-hundred feet of intestine; the blinding, acrid fragrance of a two-hundred-pound wad of gray ambergris lodged somewhere along the way; producing sounds more shrill than we can hear—like children shouting on a distant playground—and able to sort a cacophony of noise: electric crackling of shrimp, groaning of undersea quakes, roar of upwellings, whining of porpoise, hum of oceanic cables. With skin as sensitive as the inside of your wrist.

What makes them awesome is not so much these things, which are discoverable, but the mysteries that shroud them. They live at a remarkable distance from us and we have no *Pioneer II* to penetrate their world. Virtually all we know of sperm whales we have learned on the slaughter decks of oceangoing whalers and on the ways at shore stations. We do not even know how many there are; in December 1978, the Scientific Committee of the International Whaling Commission said it could not set a quota for a worldwide sperm whale kill—so little was known that any number written down would be ridiculous.*

*A quota of 5000 was nevertheless set. In June 1979, within days of the Florence stranding but apparently unrelated to it, the IWC dropped the 1980 world sperm whale quota to 2203 and set aside the Indian Ocean as a sanctuary. (By 1987 the quota was 0, though special exemptions permit some 200 sperm whales still to be taken worldwide.)

The sperm whale, in all its range of behaviors—from the enraged white bull called Mocha Dick that stove whaling ships off the coast of Peru in 1810, to a nameless female giving birth to a fourteen-foot, one-ton calf in equatorial waters in the Pacific—remains distant. The general mystery is enhanced by specific mysteries: the sperm whale's brain is larger than the brain of any other creature that ever lived. Beyond the storage of incomprehensible amounts of information, we do not know what purpose such size serves. And we do not know what to make of its most distinctive anatomical feature, the spermaceti organ. An article in *Scientific American*, published several months before the stranding, suggests that the whale can control the density of its spermaceti oil, thereby altering its specific gravity to assist it in diving. It is argued also that the huge organ, located in the head, serves as a means of generating and focusing sound, but there is not yet any agreement on these speculations.

Of the many sperm whale strandings in recorded history, only three have been larger than the one in Oregon. The most recent was of fifty-six on the eastern Baja coast near Playa San Rafael on January 6, 1979. But the Florence stranding is perhaps the most remarkable. Trained scientists arrived almost immediately; the site was easily accessible, with even an airstrip close by. It was within an hour's drive of two major West Coast marine-science centers. And the stranding seemed to be of a whole social unit. That the animals were still alive meant live blood specimens could be taken. And by an

uncanny coincidence, a convention of the American Society of Mammalogists was scheduled to convene June 18 at Oregon State University in Corvallis, less than a two-hour drive away. Marine experts from all over the country would be there. (As it turned out, some of them would not bother to come over; others would secure access to the beach only to take photographs; still others would show up in sports clothes—all they had—and plunge into the gore that by the afternoon of June 18 littered the beach.)

The state police calls to Greenpeace on the night of June 16 were attempts to reach informed people to direct a rescue. Michael Piper of Greenpeace, in Eugene, was the first to arrive with a small group at about 1:30 A.M., just after a low tide at 12:59 A.M.

IRAN RIGHT OUT of my shoes," Piper says. The thought that they would still be alive—clicking and murmuring, their eyes tracking human movement, lifting their flukes, whooshing warm air from their blowholes—had not penetrated. But as he ran into the surf to fill a bucket to splash water over their heads, the proportions of the stranding and the impending tragedy overwhelmed him.

"I knew, almost from the beginning, that we were not going to get them out of there, and that even if we did, their chances of survival were a million to one," Piper said.

Just before dawn, a second contingent of Greenpeace

volunteers arrived from Portland. A Canadian, Michael Bailey, took charge and announced there was a chance with the incoming tide that one of the smaller animals could be floated off the beach and towed to sea (weights ranged from an estimated three and a half to twenty-five tons). Bruce Mate, who would become both scientific and press coordinator on the beach (the latter to his regret), phoned the Port of Coos Bay to see if an ocean-going tug or fishing vessel would be available to anchor offshore and help—Bailey's crew would ferry lines through the surf with a Zodiac boat. No one in Coos Bay was interested. A commercial helicopter service with a Skycrane capable of lifting nine tons also begged off. A call to the Coast Guard produced a helicopter, but people there pronounced any attempt to sky-tow a whale too dangerous.

The refusal of help combined with the apparent futility of the effort precipitated a genuinely compassionate gesture: Bailey strode resolutely into the freezing water and, with twenty-five or thirty others, amid flailing flukes, got a rope around the tail of an animal that weighed perhaps three or four tons. The waves knocked them down and the whale yanked them over, but they came up sputtering, to pull again. With the buoyancy provided by the incoming tide they moved the animal about thirty feet. The effort was heroic and ludicrous. As the rope began to cut into the whale's flesh, as television cameramen and press photographers crowded in, Michael Piper gave up his place on the rope in frustration and waded ashore. Later he would remark that, for some, the whale was only the means to a

political end—a dramatization of the plight of whales as a species. The distinction between the suffering individual, its internal organs hemorrhaging, its flukes sliced by the rope, and the larger issue, to save the species, confounded Piper.

A photograph of the Greenpeace volunteers pulling the whale showed up nationally in newspapers the next day. A week later, a marine mammalogist wondered if any more damaging picture could have been circulated. It would convince people something could have been done, when in fact, he said, the whales were doomed as soon as they came ashore.

For many, transfixed on the beach by their own helplessness, the value of the gesture transcended the fact.

By midmorning Piper was so disturbed, so embarrassed by the drunks and by people wrangling to get up on the whales or in front of photographers, that he left. As he drove off through the crowds (arriving now by the hundreds, many in campers and motor homes), gray whales were seen offshore, with several circling sperm whales. "The best thing we could have done," Piper said, alluding to this, "was offer our presence, to be with them while they were alive, to show some compassion."

Irritated by a callous (to him) press that seemed to have only one question—Why did they come ashore?—Piper had blurred out that the whales may have come ashore "because they were tired of running" from commercial whalers. Scientists scoffed at the remark, but

Piper, recalling it a week later, would not take it back. He said it was as logical as any other explanation offered in those first few hours.

Uneasy philosophical disagreement divided people on the beach from the beginning. Those for whom the stranding was a numinous event were estranged by the clowning of those who regarded it as principally entertainment. A few scientists irritated everyone with their preemptive, self-important air. When they put chain saws to the lower jaws of dead sperm whales lying only a few feet from whales not yet dead, there were angry shouts of condemnation. When townspeople kept at bay—"This is history, dammit," one man screamed at a state trooper, "and I want my kids to see it!"—saw twenty reporters, each claiming an affiliation with the same weekly newspaper, gain the closeness to the whales denied them, there were shouts of cynical derision.

"The effect of all this," said Michael Gannon, director of a national group called Oregonians Cooperating to Protect Whales, of the undercurrent of elitism and outrage, "was that it interfered with the spiritual and emotional ability of people to deal with the phenomenon. It was like being at a funeral where you were not allowed to mourn."

BOB WARREN, a patrolman with the U.S. Forest Service, said he was nearly brought to tears by what faced him Sunday morning. "I had no conception of what a whale beaching would be like. I was apprehen-

sive about it, about all the tourists and the law-enforcement atmosphere. When I drove up, the whole thing hit me in the stomach: I saw these *numbers*, these damn orange numbers—41, 40, 39—spray-painted on these dying animals. The media were coming on like the marines, in taxicabs, helicopters, low-flying aircraft. Biologists were saying, 'We've got to *euthanize* them.' It made me sick."

By this time Sunday morning, perhaps five hundred people had gathered; the crowd would swell to more than two thousand before evening, in spite of a drizzling rain. The state trooper who briefed Warren outlined the major problems: traffic was backing up on the South Jetty Road almost five miles to U.S. 101; the whales' teeth were "as valuable as gold" and individuals with hammers and saws had been warned away already; people were sticking their hands in the whales' mouths and were in danger of being killed by the pounding flukes; and there was a public-health problem—the whales might have come ashore with a communicable disease. (According to several experts, the danger to public health was minor, but in the early confusion it served as an excuse to keep the crowd back so scientists could work. Ironically, the threat would assume a life of its own two days later and scientists would find themselves working frantically ahead of single-minded state burial crews.)

One of the first things Warren and others did was to rope off the whales with orange ribbon and lath stakes, establishing a line beyond which the public was no longer permitted. Someone thoughtful among them

ran the ribbon close enough to one whale to allow people to peer into the dark eyes, to see scars left by struggling squid, lamprey eels, and sharp boulders on the ocean floor, the patches of diatoms growing on the skin, the marbling streaking back symmetrically from the genital slit, the startlingly gentle white mouth ("What a really beautiful and chaste-looking mouth!" Melville wrote. "From floor to ceiling lined, or rather papered with a glistening white membrane, glossy as bridal satins"), to see the teeth, gleaming in the long, almost absurdly narrow jaw. In *The Year of the Whale*, Victor Scheffer describes the tooth as "creamy white, a cylinder lightly curved, a thing of art which fits delightfully in the palm of my hand."

The temptation to possess—a Polaroid of oneself standing over a whale, a plug of flesh removed with a penknife, a souvenir squid beak plucked deftly from an exposed intestine by a scientist—was almost palpable in the air.

"From the beginning," Warren continued, "I was operating on two levels: as a law-enforcement officer with a job, and as a person." He escorted people away from the whales, explaining as well as he could the threat of disease, wishing himself to reach out with them, to touch the animals. He recalls his rage watching people poke at a sensitive area under the whales' eyes to make them react, and calmly directing people to step back, to let the animals die in peace. Nothing could be done, he would say. How do you know? they would ask. He didn't.

Warren was awed by the sudden, whooshing breath that broke the silence around an animal perhaps once every fifteen minutes, and saddened by the pitiable way some of them were mired with their asymmetrical blow-hole sanded in, dead. Near those still breathing he drove in lath stakes with the word LIVE written on them. The hopelessness of it, he said, and the rarity of the event were rendered absurd by his having to yell into a bull-horn, by the blood on the beach, the whales' blinking, the taunters hoisting beer cans to the police.

One of the things about being human, Warren reflected, is learning to see beyond the vulgar. Along with the jocosse in the crowd, he said, there were hundreds who whispered to each other, as if in a grove of enormous trees. And faces that looked as though they were awaiting word of relatives presumed dead in an air crash. He remembers in particular a man in his forties, "dressed in polyesters," who stood with his daughter in a tidal pool inside the barrier, splashing cool water on a whale. Warren asked them to please step back. "Why?" the man asked. Someone in the crowd yelled an obscenity at Warren. Warren thought to himself: Why is there no room for the decency of this gesture?

THE LEAST UNDERSTOOD and perhaps most disruptive incident on the beach on that first day was the attempt of veterinarians to kill the whales, first by injecting M-99, a morphine-base drug, then by ramming pipes into their pleural cavities to collapse their

lungs, and finally by severing major arteries and letting them bleed to death. The techniques were crude, but no one knew enough sperm whale anatomy or physiology to make a clean job of it, and no one wanted to try some of the alternatives—from curare to dynamite—that would have made the job quicker. The ineptitude of the veterinarians caused them a private embarrassment to which they gave little public expression. Their frustration at their own inability to do anything to "help" the whales was exacerbated by nonscientists demanding from the sidelines that the animals be "put out of their misery." (The reasons for attempting euthanasia were poorly understood, philosophically and medically, and the issue nagged people long after the beach bore not a trace of the incident itself.)

As events unfolded on the beach, the first whale died shortly after the stranding, the last almost thirty-six hours later; suffocation and overheating were the primary causes. By waiting as long as they did to try to kill some of the animals and by allowing others to die in their own time, pathologists, toxicologists, parasitologists, geneticists, and others got tissues of poor quality to work with.* The disappointment was all the deeper because never had so many scientists been in a position

* A subsequent report, presented at a marine-mammals conference in Seattle in October 1979, made it clear that the whales began to suffer the effects of heat stress almost immediately. The breakdown of protein structures in their tissues made discovery of a cause of death difficult; from the beginning, edema, capillary dilation, and hemorrhaging made their recovery unlikely. Ice, seawater pumps, and tents for shade rather than Zodiac boats and towlines were suggested if useful tissue was to be salvaged in the future from large whales.

to gather so much information. (Even with this loss and an initial lack of suitable equipment—chemicals to preserve tissues, blood-analysis kits, bone saws, flensing knives—the small core of twenty or so scientists “increased human knowledge about sperm whales several hundred percent,” according to Mate.)

The fact that almost anything learned was likely to be valuable was meager consolation to scientists hurt by charges that they were cold and brutal people, irreverently jerking fetuses from the dead. Among these scientists were people who sat alone in silence, who departed in anger, and who broke down and cried.

NO ONE KNOWS why whales strand. It is almost always toothed whales that do, rather than baleen whales, most commonly pilot whales, Atlantic white-sided dolphins, false killer whales, and sperm whales—none of which are ordinarily found close to shore. Frequently they strand on gently sloping beaches. Among the more tenable explanations: 1) extreme social cohesion, where one sick animal is relentlessly followed ashore by many healthy animals; 2) disease or parasitic infection that affects the animals' ability to navigate; 3) harassment, by predators and, deliberate or inadvertent, by humans; 4) a reversion to phylogenetically primitive escape behavior—get out of the water—precipitated by stress.

At a public meeting in Florence—arranged by the local librarian to explain to a public kept off the beach

what had happened, and to which invited scientists did not come—other explanations were offered. Someone had noticed whales splashing in apparent confusion near a river dredge and thought the sound of its engines might have driven the whales crazy. Local fishermen said there had been an unusual, near-shore warm current on June 16, with a concentration of plankton so thick they had trouble penetrating it with their depth finders. Another suggestion was that the whales might have been temporarily deranged by poisons in diatoms concentrated in fish they were eating.

The seventy-five or so people at the meeting seemed irritated that there was no answer, as did local reporters looking for an end to the story. Had scientists been there it is unlikely they could have suggested one. The beach was a gently sloping one, but the Florence whales showed no evidence of parasitism or disease, and modern research makes it clear that no single explanation will suffice. For those who would blame the machinations of modern man, scientists would have pointed out that strandings have been recorded since the time of Aristotle's *Historia animalium*.

The first marine biologist to arrive on the beach, at 3:30 A.M. Sunday, was Michael Graybill, a young instructor from the Oregon Institute of Marine Biology. He was not as perplexed as other scientists would be; a few months before he had dismantled the rotting carcass of a fifty-six-foot sperm whale that had washed ashore thirty miles south of Florence.

Graybill counted the animals, identified them as

sperm whales, noted that, oddly, there were no nursing calves or obviously young animals, and that they all seemed "undersized." He examined their skin and eyes, smelled their breath, looked for signs of oral and anal discharge, and began the task of sexing and measuring the animals.

Driving to the site, Graybill worried most about someone "bashing their teeth out" before he got there. He wasn't worried about communicable disease; he was "willing to gamble" on that. He regarded efforts to save the whales, however, as unnatural interference in their death. Later, he cynically observed "how much 'science' took place at the heads of sperm whales" where people were removing teeth; and he complained that if they really cared about the worldwide fate of whales, Greenpeace volunteers would have stayed to help scientists with postmortems. (Some did. Others left because they could not stand to watch the animals die.)

BEGINNING SUNDAY MORNING, scientists had their first chance to draw blood from live, unwounded sperm whales (they used comparatively tiny one-and-a-half-inch, 18-gauge hypodermic needles stuck in vessels near the surface of the skin on the flukes). With the help of a blue, organic tracer they estimated blood volume at five hundred gallons. In subsequent stages, blubber, eyes, teeth, testicles, ovaries, stomach contents, and specific tissues were removed—the teeth for aging, the eyes for corneal cells to discover genetic relationships within the

group. Postmortems were performed on ten females; three near-term fetuses were removed. An attempt was made to photograph the animals systematically.

The atmosphere on the beach shifted perceptibly over the next six days. On Sunday, a cool, cloudy day during which it rained, as many as three thousand people may have been on the beach. Police finally closed the access road to the area to discourage more from coming. Attempts to euthanize the animals continued, the jaws of the dead were being sawed off, and, in the words of one observer, "there was a television crew with a backdrop of stranded whales every twenty feet on the foredune."

By Monday the crowds were larger, but, in the estimation of a Forest Service employee, "of a higher quality. The type of people who show up at an automobile accident were gone; these were people who really wanted to see the whales. It was a four-and-a-half-mile walk in from the highway, and I talked with a woman who was seven months pregnant who made it and a man in a business suit and dress shoes who drove all the way down from Seattle."

Monday afternoon the crowds thinned. The beach had become a scene of postmortem gore sufficient to turn most people away. The outgoing tide had carried off gallons of blood and offal, drawing spiny dogfish sharks and smoothhound sharks into the breakers. As the animals died, scientists cut into them to relieve gaseous pressure—the resultant explosions could be heard half a mile away. A forty-pound chunk of liver whizzed

by someone's back-turned shoulders; sixty feet of pearly-gray intestine unfurled with a snap against the sky. By evening the beach was covered with more than a hundred tons of intestines. Having to open the abdominal cavities so precipitately precluded, to the scientists' dismay, any chance of an uncontaminated examination.

By Tuesday the beach was closed to the public. The whale carcasses were being prepared for burning and burial, a task that would take four days, and reporters had given up asking why the stranding had happened, to comment on the stench.

THE MAN RESPONSIBLE for coordinating scientific work at the stranding, thirty-three-year-old Bruce Mate, is well regarded by his colleagues. Deborah Duffield, a geneticist from Portland State University, reiterated the feelings of several when she said of him: "The most unusual thing was that he got all of us with our different, sometimes competing, interests to work together. You can't comprehend what an extraordinary achievement that is in a situation like this."

On the beach Mate was also the principal source of information for the press. Though he was courteous to interviewers and careful not to criticize a sometimes impatient approach, one suspected he was disturbed by the role and uncertain what, if anything, he owed the nonscientific community.

In his small, cramped office at the Marine Science Center in South Beach, Mate agreed that everyone

involved—scientists, environmentalists, the police, the state agencies, the public—took views that were occasionally in opposition and that these views were often proprietary. He thought it was the business of science to obtain data and physical specimens on the beach, thereby acquiring rights of "ownership," and yet he acknowledged misgivings about this because he and others involved are to some extent publicly funded scientists.

The task that faced him was deceptively simple: get as much information as possible off the beach before the burning crews, nervous about a public-health hazard and eager to end the incident, destroyed the animals. But what about the way science dominated the scene, getting the police, for example, to keep the crowd away so science could exercise its proprietary interest? "I don't know how to cope with the public's desire to come and see. Letting those few people onto the beach would have precluded our getting that much more information to give to a much larger, national audience."

What about charges that science operated in a cold-blooded and, in the case of trying to collapse the whales' lungs, ignorant way? "Coming among these whales, watching them die and in some cases helping them to die—needless suffering is almost incomprehensible to me. . . ." Mate paused, studied the papers on his desk, unsatisfied, it seemed, with his tack; ". . . there are moral and ethical questions here. It's like dealing with terminal cancer."

No one, he seemed to suggest, liked how fast it had all happened.

Had he been worried about anything on the beach? "Yes! I was appalled at the way professional people were going about [postmortems] without gloves. I was afraid for the Greenpeace people in a potentially life-threatening situation in the surf." He was also afraid that it would all get away from him because of the unknowns. What, in fact, *did* one save when faced with such an enormous amount of bone and tissue? But he came away happy. "This was the greatest scientific shot anyone ever had with large whales." After a moment he added, "If it happened tomorrow, we would be four times better."

Sitting at his desk, nursing a pinched nerve in his back, surrounded by phone messages from the press, he seemed seasoned.

MATE'S TWENTY-SEVEN-YEAR-OLD graduate assistant, Jim Harvey, arrived on the beach at dawn on Sunday. At the first sight of the whales from the top of the dunes, strung out nose to flukes in a line five or six hundred yards long, the waves of a high tide breaking over them, Harvey simply sat down, awestruck at their size and number. He felt deeply sad, too, but as he drew near he felt "a rush of exhilaration, because there was so much information to be gathered." He could not get over the feeling, as he worked, of the size of them. (One afternoon a scientist stood confounded in a whale's abdomen, asking a colleague next to him, "Where's the liver?")

Deborah Duffield said of her experience on the

beach: "It hurt me more than watching human beings die. I couldn't cope with the pain, the futility. . . . I just turned into myself. It brought out the scientist in me." Another scientist spoke of his hostility toward the sullen crowd, of directing that anger at himself, of becoming cold and going to work.

For Harvey and others, there was one incident that broke scientific concentration and brought with it a feeling of impropriety. Several scientists had started to strip blubber from a dead whale. Suddenly the whale next to it began pounding the beach with its flukes. The pounding continued for fifteen minutes—lifting and slamming the flukes to the left, lifting and slamming the flukes to the right.

When the animal quieted, they resumed work.

"Scientists rarely get a chance to express their feelings," Harvey said. "I was interested in other people's views, and I wanted to share mine, which are biological. I noticed some people who sat quietly for a long time behind the barriers in religious stances. I very much wanted to know their views. So many of the people who came down here were so sympathetic and full of concern—I wished I had the time to talk to them all." Harvey remembered something vividly. On the first day he put his face near the blowhole of one of the whales: a cylinder of clean, warm, humid air almost a foot in diameter blew back his hair.

* * *

MY VIEW ON IT," said Joe Davis of the Oregon Parks Department, "wasn't the scientific part. My thought on it now is how nice it would have been to have been somewhere else." His smile falls between wryness and regret.

When something remarkable happens and bureaucrats take it for only a nuisance, it is often stripped of whatever mystery it may hold. The awesome becomes common. Joe Davis, park manager at Honeyman Dunes State Park, adjacent to the stranding, was charged by the state with getting rid of the whales. He said he didn't take a moment to wonder at the mystery of it.

If ethical problems beset scientists, and mystical considerations occupied other onlookers, a set of concerns more prosaic confronted the police and the Oregon Parks Department. On Sunday night, June 17, police arrested a man in a camouflage suit caught breaking teeth out of a whale's jaw with a hammer and chisel. That night (and the next, and the next) people continued to play games with the police. The Parks Department, for its part, was faced with the disposal of five hundred tons of whale flesh that county environmental and health authorities said they couldn't burn—the solution to the problem at Playa San Rafael—and scientists said couldn't be buried. If buried, the carcasses would become hard envelopes of rotting flesh, the internal organs would liquefy and leach out onto the beach, and winter storms would uncover the whole mess.

This controversy, the public-health question, what to do about excessive numbers of press people, and

concern over who was going to pay the bill (the Forest Service had donated tools, vehicles, and labor, but two bulldozers had had to be hired, at a hundred dollars and sixty dollars an hour) precipitated a meeting in Florence on Tuesday morning, June 19. A Forest Service employee, who asked not to be identified, thought the pressures that led to the meeting marked a difference between those who came to the beach out of compassion and genuine interest and those for whom it was "only a headache."

The principal issue, after an agreement was reached to burn the whales, then bury them, was who was going to pay. The state was reluctant; the scientists were impoverished. (It would be months before Mate would begin to recover \$5,000 of his own money advanced to pay for equipment, transportation, and bulldozer time. "No one wants to fund work that's finished," Mate observed sardonically.) Commercial firms were averse to donating burning materials, or even transportation for them; G.P. Excavating of Florence did reduce rental fees on its bulldozers by about one-third and "broke even" after paying its operators.

The state finally took responsibility for the disposal and assumed the \$25,000 cleanup bill, but it wanted to hear nothing about science's wish to salvage skeletons—it wanted the job finished.* Arrangements were made to

*Three months later on September 6, 1979, an eighty-five-foot female blue whale washed ashore in Northern California. Ensuing argument over responsibility for disposal prevented scientists from going near the whale until September 13, by which time it had been severely battered on the rocks and vandalized.

bring in a crew of boys from the Young Adult Conservation Corps, and the Forest Service, always, it seemed, amenable, agreed to donate several barrels of Alumagel, a napalmlike substance.

It was further decided to ban the public from the beach during the burning, for health and safety reasons. Only the disposal crews, scientists, police, and selected press would be admitted. The criterion for press admittance was possession of "a legitimate press card."

THE ROLE of the press at such events is somewhat predictable. They will repeatedly ask the same, obvious questions; they will often know little of the science involved; occasionally they will intimidate and harass in order to ascertain (or assign) blame. An upper-level Forest Service employee accused the press of asking "the most uninteresting and intimidating kinds of questions." A State Parks employee felt the press fostered dissension over who was going to pay for the disposal. He was also angry with newspaper people for ignoring "the human side," the fact that many state police troopers worked long hours of overtime, and that Forest Service employees performed a number of menial tasks in an emotionally charged environment of rotting flesh. "After a week of sixteen-hour days, your nerves are raw, you stink, you just want to get away from these continual questions."

In the press's defense, the people who objected most were those worried about criticism of their own

performance and those deeply frustrated by the trivialization of the event. The press—probing, perhaps ineptly—made people feel no more than their own misgivings.

The publisher of the local *Siuslaw News*, Paul Holman, said before it was over that the whale stranding had become a nuisance. When police closed the road to the beach a man in a stateside truck began ferrying people the four and a half miles to the whales for a dollar each. And a dollar back. The local airport, as well as tourist centers offering seaplane rides, were doing a "land-office business" in flyovers. Gas station operators got tired of telling tourists how to get to the beach. The Florence City Hall was swamped with calls about the burning, one from a man who was afraid his horses would be killed by the fallout on his pasture. Dune-buggy enthusiasts were angry at whale people who for two days blocked access to their hill-climbing area.

Whatever its interest, the press was largely gone by Monday afternoon. As the burning and burying commenced, the number of interested scientists also thinned. By Wednesday there were only about thirty people left on the beach. Bob Adams, acting director of the Lane Regional Air Pollution Authority, was monitoring the smoke. Neal Langbehn of the National Marine Fisheries Service stood guard over a pile of plastic-wrapped sperm whale jaws. Michael Graybill led a team flensing out skulls. The state fretted over a way to keep the carcasses burning. (It would finally be done with thousands of automobile and truck tires, cordwood, diesel fuel, and

Alumagel.) As Mate watched he considered the threshold of boredom in people, and mourned the loss, among other things, of forty-one sperm whale skeletons.

A journalist, one of the last two or three, asked somebody to take her picture while she stood with a small poodle in her arms in front of the burning pits.

AS IS OFTEN THE CASE with such events, what is salvaged is as much due to goodwill as it is to expertise. The Forest Service was widely complimented for helping, and Stafford Owen, the acting area ranger at the agency's Oregon Dunes National Recreation Area during the incident, tried to say why: "Most of us aren't highly educated people. We have had to work at a variety of things all our lives—operating a chain saw, repairing a truck engine, running a farm. We had the skills these doctors and scientists needed."

A soft-spoken colleague, Gene Large, trying to elaborate but not to make too much of himself, said, "I don't think the scientists had as much knowledge [of large mammalian anatomy] as I did. When it came to it, I had to show some of them where the ribs were." After a moment, Large said, "Trying to cut those whales open with a chain saw was like trying to slaughter a beef with a pen knife." "I didn't enjoy any part of it," Large said of the dismembering with chain saws and winches. "I think the older you get, the more sensitive you get."

He mentioned an older friend who walked away from a dead, fifteen-foot, near-term fetus being lifted out of a gutted whale, and for a time wouldn't speak.

ON WEDNESDAY AFTERNOON the whales were ignited in pits at the foot of the foredune. As they burned they were rendered, and when their oil caught fire they began to boil in it. The seething roar was muffled by a steady onshore breeze; the oily black smoke drifted south-east over the dunes, over English beach grass and pearly everlasting, sand verbena, and the purple flowers of beach pea, green leaves of sweet clover, and the bright yellow blooms of the monkey flower. It thinned until it disappeared against a weak-blue sky.

While fire cracked the blubber of one-eyed, jawless carcasses, a bulldozer the size of a two-car garage grunted in a trench being dug to the north for the last of them. These were still sprawled at the water's edge. Up close, the black, blistered skin, bearing scars of knives and gouging fingernails, looked like the shriveled surface of a pond evaporated beneath a summer sun. Their gray-blue innards lay about on the sand like bags of discarded laundry. Their purple tongues were wedged in retreat in their throats. Spermaceti oil dripped from holes in their heads, solidifying in the wind to stand in translucent stalagmites twenty inches high. Around them were tidal pools opaque with coagulated blood and, beyond, a pink surf.

As far as I know, no novelist, no historian, no moral philosopher, no scholar of Melville, no rabbi, no painter, no theologian had been on the beach. No one had thought to call them or to fly them in. At the end they would not have been allowed past the barricades.

The whales made a sound, someone had said, like the sound a big fir makes breaking off the stump just as the saw is pulled away. A thin screech.

Children in the Woods

WHEN I WAS A CHILD growing up in the San Fernando Valley in California, a trip into Los Angeles was special. The sensation of movement from a rural area into an urban one was sharp. On one of these charged occasions, walking down a sidewalk with my mother, I stopped suddenly, caught by a pattern of sunlight trapped in a spiraling imperfection in a windowpane. A stranger, an elderly woman in a cloth coat and a dark hat, spoke out spontaneously, saying how remarkable it is that children notice these things.

I have never forgotten the texture of this incident.