





Shore Survivors

The waters around Western Australia are home to a diverse group of marine mammals. When a marine mammal is sick or injured, whether it is a massive baleen whale, a small fast-swimming dolphin or a furseal, its instinctive reaction is to beach itself so it doesn't drown, and suddenly these normally elusive animals are thrust into our world.

THE reasons for these strandings aren't always clear. Nobody really knows why certain species of whale, such as false killer whales (*Pseudorca crassidens*) and pilot whales (*Globicephala melaena*), sometimes beach themselves in large numbers.

Strandings - many of them single animals - occur much more frequently than most people realise. During the first half of 1989 11 Australian sea-lions, seven bottlenose dolphins, three common dolphins, 24 striped dolphins (from a single stranding), and four whales (beaked whale, long-finned pilot whale, sperm whale and humpback whale) were found injured or dead on Western Australian beaches. However, when things do go astray there is a network of Department of Conservation and Land Management (CALM) officers, Atlantis Marine Park staff, volunteer organisations and the public, ready to spring into action.

CALM wildlife officers are usually the first people called to the scene of a stranding. They have learnt from experience to keep an open mind when they arrive. In one instance, an animal reported to be a stranded dolphin turned out to be a dead groper. There are also visitors from places as far away as the

sub-Antarctic. Leopard seals, sub-antarctic furseals and even elephant seals have been washed up on the beach; they lose their way and are found exhausted, emaciated and often injured. None of these creatures are normally found on the WA coast.

A beached animal doesn't always need assistance - sometimes it only needs some time to rest on the beach. However, if it is injured or stressed, a veterinary opinion is sought and appropriate action taken.

Each stranding has its own special set of circumstances and provides a valuable contribution to our knowledge of marine mammals.

There are many heart-warming success stories. In May 1988 beachwalkers on Penguin Island found a stranded juvenile bottlenose dolphin (*Tursiops truncatus*). Fortunately CALM was contacted almost immediately and a wildlife officer and a vet were soon on the spot.

The dolphin was about four weeks old and totally dependent on its mother, so it was driven to Atlantis Marine Park for emergency care and held overnight. It responded well to an injection of an anti-stress drug and was walked in a pool by staff until it could swim shakily.

The next day wildlife officers patrolled the waters near the stranding site and were rewarded with the sight of a pod of bottlenose dolphins "milling" near the stranding site and behaving in an unusual

way. Channel 7 volunteered their helicopter to lift the dolphin to Shoalwater Bay, where it was transferred to a CALM boat. The helicopter located the dolphins from a high altitude then broke away to avoid upsetting the pod.

The young dolphin was released into the pod and within seconds it had disappeared and, it is hoped, was successfully reunited with its family group.

Then there was the young male sea-lion (*Landscape* Summer 1988) found near Geraldton injured and unable to feed. He had been gashed in the face by a boat propeller. CALM officers drove him to Perth where his damaged eye was removed in an emergency operation at Murdoch University. After spending several weeks recuperating at Atlantis and learning how to swim and fish with only one eye, the animal, known affectionately as Popeye, was eventually released at Beagle Islands near Geraldton.

Late last year a female leopard seal (*Hydrurga leptonyx*) "hauled out" 10 kilometres north of Two Rocks. The vet who arrived to inspect the animal reported that it was dehydrated and had poor body condition. He recommended that the seal be taken to Atlantis Marine Park and placed on a course of antibiotics. Here it rapidly gained weight, consuming about 14 kilograms of fish each day. After about three and a half weeks it was back in peak condition and was released off Augusta to enable it to find the southern currents that would take it back to Antarctica.

Of course, not all attempts at rehabilitation are as successful as these, but even the failures are important; new methods are tested and vital insights gained. With every day an animal can be kept alive there is a greater chance that the next rehabilitation attempt may succeed.

Recently, an Australian sea-lion (*Neophoca cinerea*) was taken to Atlantis Marine Park to be nursed back to health. It did not respond well to treatment and tests revealed that it was riddled with a parasite similar to heartworm. This was the first time the disease had ever been found in a wild population of sea-lions and this has potentially enormous implications. But the discovery at least alerted CALM staff to the possibility that the disease may be found in wild populations. Research is now underway at Murdoch University to find out if this

Data on dead marine mammals is recorded for use in scientific research.

Photo - Tony Tapper ▼

Photo previous page - Nick Gales





The baby pilot whale found near Lancelin was walked by volunteers for 24 hours a day to simulate the natural situation. In the ocean it would be held in the slipstream of its mother's body. Photo - Gerhard Freudenthaller ◀

This sea-lion, known as Popeye, was gashed in the face by a boat propeller, but speedily recovered from an operation to remove his eye. He was later released near Geraldton. Photo - Carolyn Thomson ▼

Murdoch University perform operations on sea-lions and other marine mammals. They provide their services and facilities free of charge. Photo - Nick Gales ▼▼

is the case. The sea-lion in question did eventually improve under treatment and was released. However, it re-stranded and eventually died. The post-mortem showed it had severe arthritis.

In October 1989 a day-old pilot whale was stranded on the beach at Lancelin Bay. A wildlife officer assessed the calf's condition and, when the rest of the pod could not be located by helicopter, drove it to Atlantis Marine Park. There it was continuously walked and supported in a small pool and fed a cream and milk powder mixture. After a few days it began to refuse food and, five days after being stranded, it died of a bacterial infection.

The bid to keep the calf alive was unique - it was the first time anywhere in the world that there had been an attempt to rehabilitate a whale so young.

Most stranded marine mammals are dead before they are found. If it is practical, and the body is not too badly decomposed, an autopsy may be done by Murdoch University or one of a number of country vets to try to determine the cause of death. Other vital information is also obtained from these examinations. If an autopsy is impractical, wildlife officers record basic biological data and collect tissue samples used to analyse heavy metal and pesticide content.

Although most whales were rescued during the mass strandings in Augusta in 1986 and 1988, some animals died. Tissue samples and teeth were taken by Daryl Kitchener, a research scientist from the WA Museum. He has made some interesting findings. The tissue contained eight heavy metals, as well as pesticides. The teeth were sent to Japan to determine

the age of the animals from which they were taken. So it should be possible to compare the accumulation rates of heavy metals in the whales with their age. This has not been done before anywhere in the world. Perhaps one day this research may even shed some light on why mass strandings occur.

Autopsies and other data have shown that a disturbing number of marine mammal deaths are caused by humans and their lifestyle. All too often they become entangled in marine plastics (*Landscape* Summer 1987), collide with boat propellers or drown in craypots. At least 35 per cent of the sea-lion deaths recorded by CALM over the last two years are known to be caused by humans.

If a marine mammal is suffering and veterinary advice is that there is no doubt that it will die, a decision may be





Minister for Conservation and Land Management Ian Taylor and veterinarian Nick Gales release a rehabilitated sea-lion.
Photo - Peter Lambert ▲

taken to euthanise it humanely. This is always done with veterinary guidance and is only considered in the interest of the animal.

The public plays a major role in marine mammal strandings and rescues. Many volunteers were involved in all three mass whale and dolphin strandings at Augusta. These people have now built up a considerable degree of expertise.

A group, Westwhales, was formed after the 1988 whale rescue to enable strandings to be dealt with more effectively. Westwhales members make a commitment to turn up to a stranding at short notice. About 60 committed people attended a meeting to ratify the Westwhales constitution earlier this year and regular workshops have been held in Augusta, Bunbury and at Atlantis Marine Park. Westwhales has prepared phone lists of volunteers, radio alerts and organised local groups in each area that can be mobilised in response to single or fairly small strandings.

During the mass striped dolphin stranding in January 1989 it was a considerable advantage for CALM to be able to call on a pool of experienced volunteers, who turned up with a wetsuit and other basic equipment such as hessian. CALM also asked Westwhales and Greenpeace to help when the newborn pilot whale was stranded in early October. The groups despatched members from as far away as Nannup to support the whale around the clock.

But of course you don't have to be a Westwhales member to help during a

IF YOU FIND STRANDED MAMMALS

Contact CALM immediately:

CHIEF WILDLIFE OFFICER
(09) 367 0429;

SUPERVISING WILDLIFE
OFFICER
(09) 367 0339; or

NEAREST CALM OFFICE

(see government section of phone book).

After hours: (09) 448 1109 or (09) 401 8183.

Give as many details as possible, including:

- *description of animal (species if known)*
- *number and size*
- *exact location and weather conditions*
- *condition (whether dead or alive; any injuries)*

Remember, CALM wants to be informed of all strandings; even decomposing animals are valuable for research.

TO JOIN WESTWHALES:

Write to RMB 24, Manjimup 6255, or telephone Cecilia Aldridge (President) on (097) 561 084 or Andre Fulon (097) 721 327.



Scamperdown whales stranded at Boodjidup Beach, Margaret River.
Photo - Peter Lambert ▲

stranding. You may be walking along the beach early one morning and be the first person to stumble upon an animal that is clearly in distress. In such a case what do you do?

CALM must be notified immediately. You may be able to administer emergency first aid until help arrives. You should keep whales or dolphins cool and wet, especially the tail and flippers, and cover them with a wet cloth if it is hot. However, be careful to keep sand, water and cloth away from the blowhole. Seals or sea-lions can survive for long periods out of water, but people and dogs should be kept away to avoid distressing them. Animals returned to the ocean

prematurely usually restrand, so never move them or push them back into the water until expert help arrives.

As public awareness of these animals develops and our isolated coastline becomes increasingly accessible, more and more strandings will be reported. The positive relationship that exists between CALM, Atlantis and the many other professional and voluntary groups involved in marine mammal strandings will certainly lead to great improvements in our ability to handle these events and lead to a great increase in our knowledge of these animals. □

NICK GALES, DOUG COUGHRAN
AND CAROLYN THOMSON



Humpback whales, such as this one, are occasionally stranded on the beach, but they are so huge that very little can be done to help them. One that stranded recently at Wedge Island had to be euthanised.
Photo - Doug Coughran ◀

LANDSCOPE

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Dolphins, whales and seals frequently strand along the WA coast. Find out who helps them and what they do on p. 10.



Powerful forces have formed the rocks and land surface of WA over billions of years. See p. 48.



Why are the thousands of feral camels that roam inland Australia the scourge of the desert? Turn to p. 22.



Explore the fascinating subterranean worlds deep beneath the earth on p. 28.



Inlets and rivers, towering karri and tingle forests, rugged coastline and remote wilderness areas - Walpole-Nornalup National Park has it all. See p. 15.

C O V E R

Australian sea-lion (Neophoca cinerea). Photo - Nick Gales



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