

A close-up photograph of two seals on a beach. The seal on the right is the central focus, with its mouth wide open, showing a bright pink tongue and teeth. The seal on the left is partially visible, looking towards the central seal. The background is a clear, bright blue sky.

# *The* *Boisterous* *Seal*

JAMIE WATTS

Four tons of muscle, blubber and raw aggressive power charged up the beach, announcing its arrival with a deep, rattling belch. The sand coloured beach master in the centre did not intimidate the new arrival and there was instant tension right across the beach; the cows were uneasy.

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The new bull moved forward as the sandy beach master started to stir – I was going to see a big fight and got my video camera out to film guys fighting over girls. The big old sandy bull rolled upright, raised his head and let rip the most impressive bellow I have ever heard; it was earth-shattering. The cows knew what was coming and shuffled out of the way. The nearby bulls, even the huge and powerful ones, ran away as fast as their bellies could carry them.

All but one! The newcomer, an enormous black bull, continued to charge, straight through the cows and pups and right over anything along the way. It's hard to describe a seal sprinting on its belly, but the undulating bulk of mass has something of a juggernaut about it – cumbersome yet spectacular. The high speed belly flop rippled the thick full blubber, built up over the last year, straining the skin like an overfilled water bomb. The huge, floppy, moose like snout was now ballooning as the black bull continued his assault. The incumbent, a magnificent sand coloured beach master who had successfully frightened off all newcomers from an enormous harem of two hundred

cows, raised himself higher to give off another long bellow. This time, though, there was to be no fight. Something about the newcomer's approach was too big, too powerful even for the sand coloured behemoth - his reign was over. He turned and fled with haste, now a straggler with the other bulls around the harem's edge.

Southern elephant seals, *Mirounga leonina*, are extremely specialised seals. They dive deeper than any dolphin; the vast majority of their lives are spent in the deep, cold, exposed Southern Ocean where they are almost never seen. They are by far the largest carnivores on earth that spend little time ashore. Sexually, they are dimorphic of all mammals with bulls reaching five to ten times the bulk of the cows. For the month or so ashore, they display some of the most intense and violent aggression and yet at sea, they are designed to relax their physiology for slow, deep diving.

Privileged to live two years of my life on the incredible island of South Georgia, every spring, as if to announce the beginning of the wildlife season, the calm of winter is shattered by three hundred thousand or more, (half of the world's elephant seals), arriving ashore. As the snow melts from the beach, the first bull

elephant seals appear in the shallows, peering and sniffing at the territory. The bulls arrive slowly at first, mainly smaller bulls, non-contenders for the harems. They are thick and slug-like, engorged with blubber. While they bellow and chase each other, they are reasonably tolerant until a few cows arrive. I get the impression an elephant seal harem is a little more than a protection racket. The cows get harassed, bitten, squashed and assaulted by the bulls. The big, mature bulls seem a little more 'streetwise', using minimum effort to secure their turf. Split-nose was our local beach master for my last spring on the island. Although he was 'only' about thirteen feet long, Split nose was immensely broad, and rarely moved; meaning he kept his bulk for the entire season, while the other, more active bulls quickly lost theirs. A breeding condition bull can weigh three and a half tons or more. Whether due to genetics or being better at finding food, a handful of bulls seem to grow considerably broader and fatter than the rest. Natural selection has favoured the more massive, aggressive and belligerent bulls, and the enormous squid and lanternfish populations around the Southern Ocean have allowed the southern elephant seal to reach nearly half the bulk of their northern counterparts.



WHILE THIS MIGHT SEEM LIKE A FRIENDLY EMBRACE, these two male Elephant seals are actually charging one another in battle.

PHOTO BY MICHAELAW.COM



One big bull, Ragged-nose, was ousted from the beach master spot the previous year in a vicious 15 minutes battle – a rare and nasty confrontation between two well matched bulls. Normally, if bellowing doesn't chase off a rival, a fight is decided in a couple of blows. The bulls rear up on their tails to nearly ten feet high then slam their full weight into each other, teeth first. Frequently, smaller bulls get badly cut and bloodied taking on a larger bull. Badly torn snouts and neck shields are common; eyes are occasionally taken out, and deaths are not unknown.

Huge size, particularly around the throat, combined with raw, explosive aggression when required, seem to be the requisites for a successful beach master. The ability to sleep with one eye open also helps. The majority of bulls who can't hold a harem, hover around the edges; obviously

frustrated, whenever the beach master snoozes, they'll try their luck with the outlying females. The cows will bawl in response and just as the pretender is 'getting down to it' the beach master usually wakes up. Often a bellow, or raised head deters; but when a chase beckons, it is quite a sight to behold.

Numbers build gradually at first but within a few days the handful of seals becomes a horde. The constant births (afterbirths), and that the seals rarely move to defecate, lend a veritable smorgasbord for the scavengers and their incessant cacophony. The general stench is reminiscent of something between steaming cows and stale urine. This mass foul-smelling nutrition must be like Christmas for the gulls, sheathbills and skuas, attracting giant petrels with their acute, pale eyes picking out a potential

feast from half a mile away. You can tell when a birth is due because the birds start to congregate behind the hapless cow. The 'muck birds' – snowy sheathbills – are particularly impatient, pecking away at her tail and flippers before the pup is even showing.

The birth itself is over in a couple of seconds as the pups emerge in a slick, torpedo shaped package. The newborn's first experience must be a rather cold world, being aggressively 'cleaned' by giant petrels, gulls and muckbirds before the mother can chase them off. The real 'feast' for the birds, is not the pup but the afterbirth. The giant petrels use their bulk, fanning and raising their tails and wings to fend off the other birds. It's not pretty but it is a very efficient cleanup, without which the beach would quickly be slick and foul.



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Top left: **A VICTORIOUS MALE ELEPHANT SEAL** is forcing the losing male into the water and far away from the victor's territory and thus access to females.

Top right: **WOUNDS FROM A BATTLE** show the high price males pay in an effort to gain access to females.

Left: **TWO MALES CHARGING AT EACH OTHER** to establish dominance over the harem of females.



WHILE A BABY SEAL IS BEING BORN, birds circle above impatiently wanting to 'clean; the afterbirth off the newly born pup and ground.

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Newborn pups are black and rather skinny with slightly unfocused, squinting eyes and snotty noses; they start to bark, bleat and snort straight away. The cows' howling and belching, the impatient bleats of the pups and the frequent bellows of the bulls, make the once silent beaches suddenly boisterous. Even when asleep, the seals constantly belch, grunt and snort to clear mites from their noses. Both mothers and pups spend the first few days sleeping after birth. The waking pups start bleating and nuzzling their mum, trying to find her nipple, often getting no where near it at first, suckling a flipper, or her side or back instead. Over the next few days, the mothers rapidly deflate; their necks appear, their skin

becomes loose and wrinkled, their tails taper and they start to look like normal seals rather than the bloated creatures that came ashore. The cows' transfer their fat reserves to their pups in just a couple of weeks with the richest fattiest milk ever produced by a mammal. Pups swell and grow at an incredible rate of up to 3 kilos a day. They balloon out to the point they can barely move and their attempts to flop along are quite comical. Most are so rotund they can barely move at first, but lie there, soaking up the nutrients, building bones and muscle. As the cows wean their pups, they become estrous (sexually receptive) and have the ever amorous attention of the bulls to contend with.



PHOTO BY MICHAELAW.COM

A MOMENT OF CALM as a seal almost poses for a photo.



**A VICTORIOUS MALE** will copulate with the entire female harem, his prize for being the best fighter.

Mating is a fairly uncultured affair; the bull shuffles over, pins a cow down with his flipper and bites into the back of her neck, then wriggles round into position. After the noisy drama of the season it's a bit of an anticlimax. In mid November, when most females have weaned their pups, mated and headed offshore to feed, exhausted bulls do the same, leaving empty beaches with piles of adorable weaners. Later in the month the pups start to play in the shallow water. They aren't the natural water babies you might expect from the most supreme breath holding diver of all seals. Wide-eyed and dopey, when they are not asleep they are discovering kelp, stones and seagulls. Infant mortality in the first year is about 50%, so many of these pups

will not be back next year. Eventually, hunger takes over and the abandoned pups swim off in search of food and start a life spent almost entirely at sea.

Their offshore life is still something of an enigma, although we are beginning to build a picture of what these extreme seals do for the rest of the year. Satellite tags and depth transducers are giving us insights into their foraging grounds; however, the specifics of their diet are still somewhat mysterious. The world they inhabit is one not often visited by humans, even less so in winter. Learning about their lives at sea is a slow process, though the drama that unfolds in front of me is well rehearsed. ○