Introduction



Welcome to the animal queendom! This book is a celebration of nature's fantastic, fearless female animals, some of whom are the deadliest and most powerful on Earth. Across these pages, you'll unearth astonishing facts about familiar species and discover jaw-dropping creatures you've never even heard of!

It's often the impressive female of a species whose fierce behaviours or unusual appearance deserve attention. Did you know that if you're stung by a bee, wasp or ant, or are bitten by a mosquito, your attacker is a female? Only females are equipped with the weaponry needed to sting or drink blood!

Not only are most female animals bigger and stronger than males of the same species, but several hold world records for size and speed. Look out for these awesome female record breakers throughout this book, including the most massive creature to have ever existed (pages 54-55).

Our planet has many more female animals living on it than male animals because some species give birth to many more females than males. Some female animals are so incredible that they can create babies all by themselves, while others only ever have female babies – males of their species have never been found. We really do live in an animal queendom!

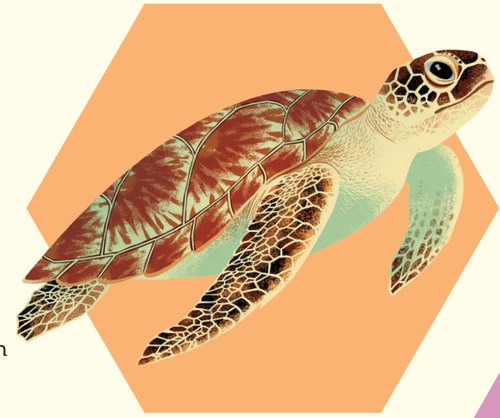
Their unique biology means that females and males of the same species can look and act completely differently. The two sexes exist because two different special cells called 'gametes' – one from a female and one from a male – are usually (but not always!) required to make a baby animal.







Female animals are defined as the sex with the body plan to make large gametes (eggs). Male animals are defined as the sex with the body plan to produce small gametes (sperm).



Shockingly, it's only in the last 100 years that we've begun to appreciate how extraordinary female animals are. For a long time, most wildlife experts were men who ignored female animals or came to incorrect conclusions about what they are capable of. Some presumed that women were not competitive or aggressive, and so assumed female animals couldn't be either. They were wrong on all counts!

Opinions only began to change when increasing numbers of women got the opportunity to study animals. They noticed the striking features and startling abilities of female animals, placing female wildlife in the scientific spotlight for the very first time and inspiring others to investigate the remarkable queendom we live in (see pages 76-77 for more on this).

Within this book, you'll meet not only the world's fastest, heaviest and largest animals, but also crafty colour-changing creatures, deeply devoted mums and even surprisingly murderous mammals. It's time to forget everything you think you know about female animals, so get ready to dive headfirst into the wonders of the animal queendom!





Swift-striking snakes

Reticulated python

LONGEST SNAKE ON EARTH

With jaws that can open extraordinarily wide to swallow her prey whole, the female reticulated python is strong, stealthy and extremely deadly. Even humans are on her menu!

Massive meals

Like most snake species, female reticulated pythons are more massive than males. Females can be almost double the male's length and four times their weight!

A fearless female can hunt bulkier and more dangerous prey, while males stick to snacking on smaller animals like rats. Antelope and wild boar are usually her meal of choice, but occasionally humans are up for grabs as well. You really don't want to meet her when she's hungry!



Reticulated pythons swallow their prey whole.

RECORD BREAKER

The female reticulated python is the world's longest snake! Females up to 10 metres long have been recorded in the wild (that's as long as six human adults laid head to toe on the ground).



Female *Male*

SIZE COMPARISON

Bigger, stronger and hungrier – females are much more dangerous than males.



A baby snake exits its egg.

EXCELLENT EGGS

Being bigger allows female reticulated pythons to have more and larger babies than other snakes, giving these babies a better chance of surviving. Their eggs are almost twice the size of a chicken's egg! Mothers typically lay around 40 large white oval eggs but can have clutches of over 100 eggs.

Lying in wait

Reticulated pythons kill by lying in wait in the rainforest and woodlands of Southeast Asia, camouflaged by the net-like (reticulated) pattern running the length of their body. A female strikes quickly, biting with her sharp, backwards-pointing teeth to secure her prey and then almost instantly wrapping her muscular coils around her victim. She squeezes so tightly that her prey's heart stops beating or they suffocate. It's very tough to make an escape!

Alphas on the attack

Meerkat

This female creature looks cute, but her behaviour is anything but! The alpha female meerkat is the queen of mean and will stop at nothing to get her own way. She bullies and attacks her sisters and daughters and even eats her grandchildren! This small, furry female is possibly the most murderous mammal on Earth.

Alpha females show no mercy to other meerkats, even babies.

Meerkats on a mission

Meerkats live in African deserts, in family mobs of up to 50 animals. A large and aggressive female, the alpha, controls life in the group and is mum to most young meerkats in the pack.

The alpha's main mission in life is to have as many babies as possible, but doing this in a harsh desert environment is difficult. To succeed, she must make all other mob members help care for her babies and cannot allow them to have any young of their own. She needs to use violence to achieve her goal!

An alpha can force females to leave her mob.

Banished from the burrow

If other female meerkats become pregnant, they are forced to leave the group's underground home and fend for themselves in the dangerous desert. If any do give birth in the burrow, the alpha meerkat shows no mercy, killing and eating the pups before banishing the mother.

CRUEL FOR A REASON

The alpha's actions may be cruel, but being ruthless means she keeps her young safe. A female alpha can have more than 80 pups during her lifetime!

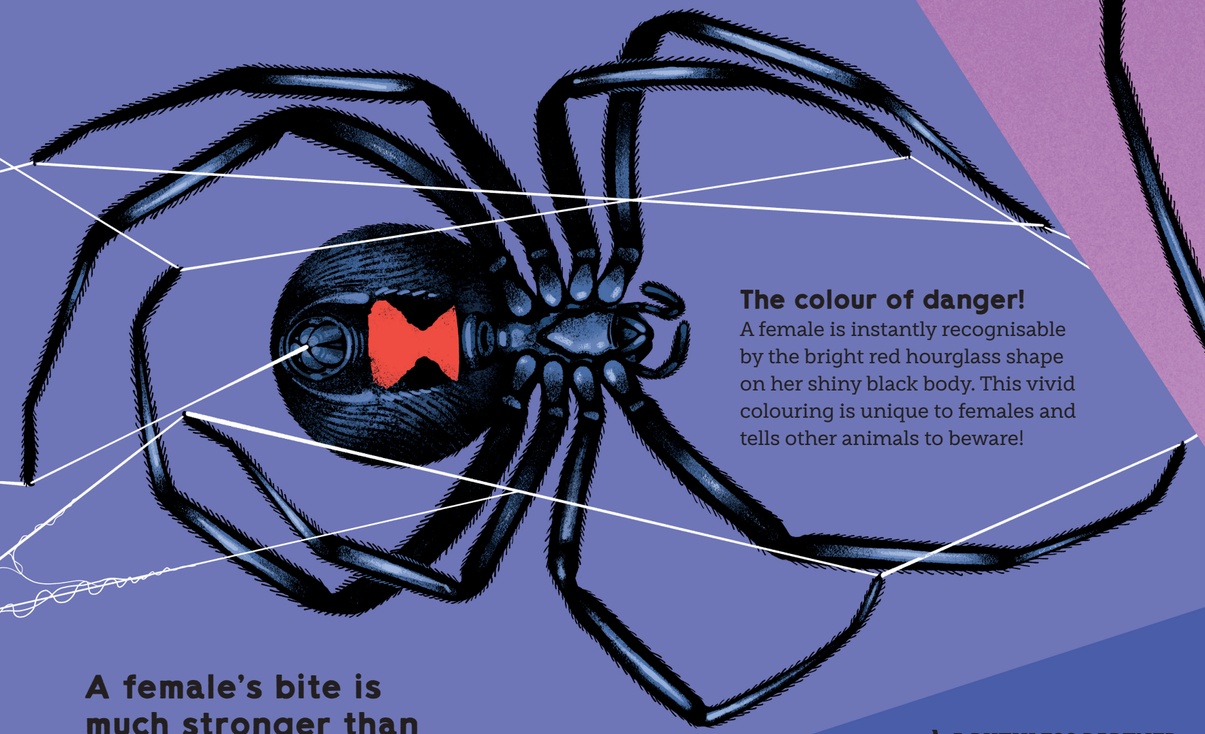
Rules for returning

During pregnancy, the alpha female meerkat becomes increasingly aggressive, scratching, biting and snatching food from lower-status females to keep them in their place. After the alpha has given birth, banished female group members are allowed to return home – but only if they agree to look after her babies!

Murderous male-eaters

Black widow spider

Female black widow spiders have a terrifying reputation – and it's a well-deserved one! Found across most of North America, females of the species are far more deadly and frightening than males.



The colour of danger!

A female is instantly recognisable by the bright red hourglass shape on her shiny black body. This vivid colouring is unique to females and tells other animals to beware!

A female's bite is much stronger than a male's – it's powerful enough to puncture human skin!

A RUTHLESS PARTNER

She's called the black widow because of her murderous habit of sometimes eating her male partner after mating (at 3.5 centimetres, she's at least twice the size of him!).

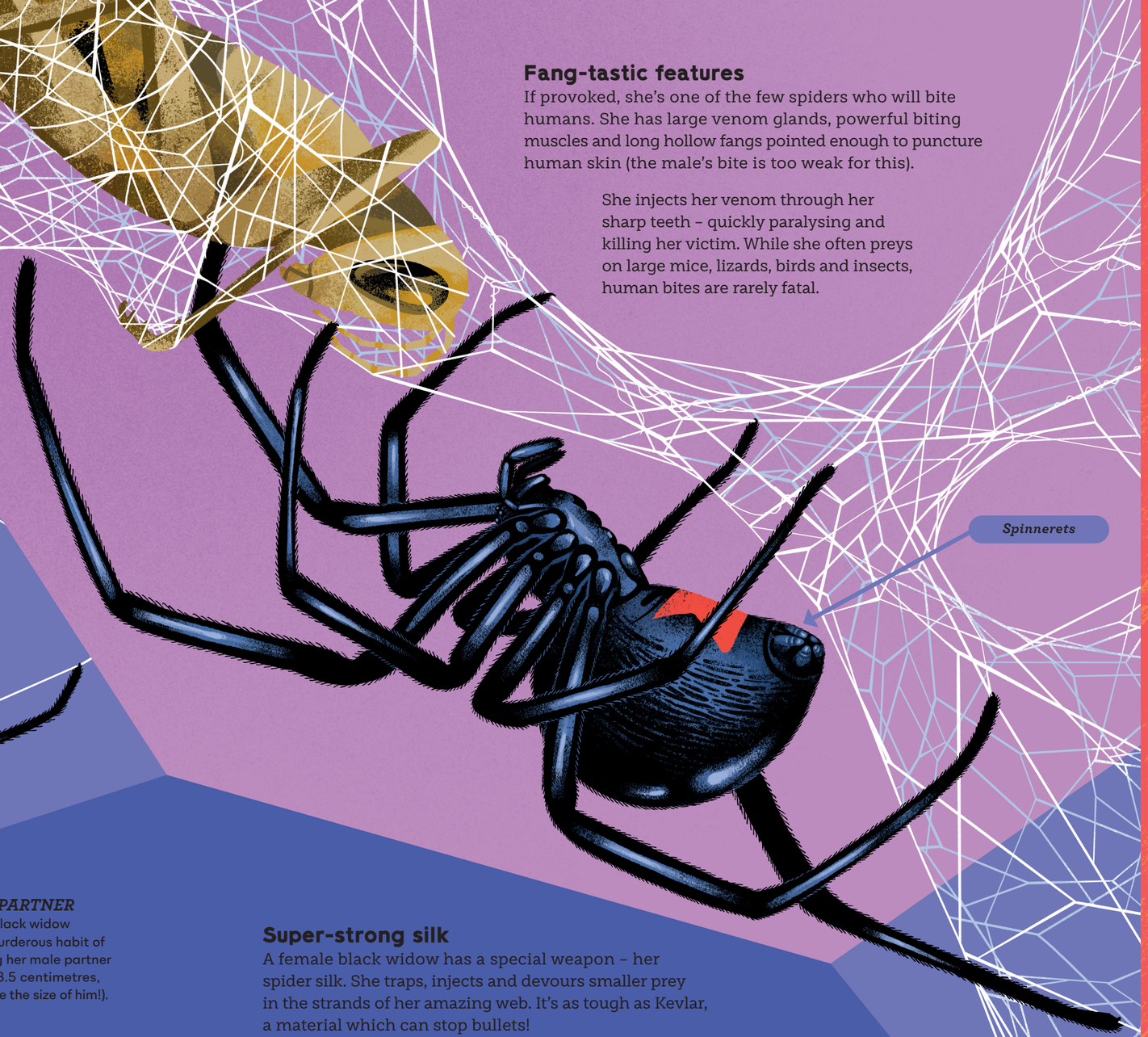


SIZE COMPARISON

Fang-tastic features

If provoked, she's one of the few spiders who will bite humans. She has large venom glands, powerful biting muscles and long hollow fangs pointed enough to puncture human skin (the male's bite is too weak for this).

She injects her venom through her sharp teeth – quickly paralysing and killing her victim. While she often preys on large mice, lizards, birds and insects, human bites are rarely fatal.



Super-strong silk

A female black widow has a special weapon – her spider silk. She traps, injects and devours smaller prey in the strands of her amazing web. It's as tough as Kevlar, a material which can stop bullets!

Females (but not males) also have a special skill called 'silk-flicking', which allows them to battle larger animals. By shooting extra-sticky silk from spinnerets on her abdomen, a female black widow can immobilise a victim, covering it in silk before she moves in for the kill. Approach this spider at your peril!



Feeding frenzies

Although they have a reputation as scavengers, hyenas are strong hunters. Sharp teeth and bone-cracking jaws mean hyenas are able to bring down prey such as zebra and wildebeest up to three times their weight. Mealtimes are highly competitive feeding frenzies: a whole carcass can be devoured, bones included, within 30 minutes!

Violent fights often break out, but females don't back down from danger. Their rank means they eat first, while males must wait their turn – or risk being attacked!

Bone-crushing killers

Spotted hyena

Female spotted hyenas are bold, brawny and ferocious predators. From their very first days on the African plains, they fight more viciously and frequently than male pups. Thanks to their greater size, strength and drive to be top dog, all females are superior to males and an alpha female leads the clan.

Back off!

An alpha female commands a clan of up to 130 hyenas, leading charges against rivals trying to take over her territory and snatch her group's prey. Clan wars are violent and hyenas can be injured and killed, but the alpha female fiercely attacks intruders in order to keep control of her queendom.



Hyenas can crush bones with their powerful jaws!

Menacing mums

Female spotted hyenas are super strong and dangerous because they need to secure food during mealtime scrums. When pregnant and breastfeeding, mothers require extra food for energy. Later, when her pup begins to eat meat, a mum will physically force rivals to back off during mealtimes so her slower, smaller pup can feed safely. If she can't do this, her pup will starve – so she needs to be a big, bad, dangerous mother!

These fierce females won't back down from a fight, and will do what it takes to become top dog.



Super-powerful predators

Great white shark

LARGEST CARNIVOROUS FISH

With multiple rows of jagged, razor-sharp teeth, great white sharks are a terrifying sight. All great whites are fearsome predators, but it's the more massive females who are typically the deadliest hunters.

These deadly hunters use their size to show males not to mess with them.

UNDER ATTACK?
Shark attacks on surfing and swimming humans are very rare, thankfully, but do happen every year, in particular off the coast of Australia and the United States of America.

Two great white shark pups swim together.

Out of nowhere

Imagine being a seal, alone in the ocean. One second, you're swimming along. The next, a gaping jaw clamps shut around you as its owner rockets out of the water. Less than a minute later, your life is over. Mega shark strikes are fast, furious and efficient – despite their large size, great whites can reach speeds of up to 40 kilometres per hour when hunting seals, fish and dolphins.

RECORD BREAKER
Female great whites are significantly bigger than males. Growing up to six metres in length, they are the planet's largest living carnivorous fish!

Who's the boss?

Great whites mostly live and hunt alone in the ocean but when two sharks do meet, they literally size each other up to see who's boss. The biggest shark is usually the female, so she wins! As well as expertly pursuing their own prey, females use their elevated status in shark society to cheekily snatch prey caught by smaller, lower-ranking male sharks.

A big reputation

Females carry and give birth to around 10 hefty pups at one time; each weighs roughly the same as an 11-year-old child (about 35 kilograms) and is around 1.5 metres long! Female great white sharks must be larger and deadlier than males in order to keep growing shark pups safe inside their bodies. Their size and skillset also help strengthen their reputation as one of the most frightening fish on Earth.

Furiously fast falcons

Peregrine falcon

FASTEST ANIMAL ON EARTH

The winner of the ultimate animal race, the female peregrine falcon is the fastest bird in the world and the fastest animal on the planet. Female falcons' extra size and strength make them record-breaking super-speedsters and allow them to be even more daring hunters than their male counterparts.



Bigger and better

Female peregrine falcons, like most birds of prey, are larger and stronger than males – this means that they can kill and carry heavier animals. Females are about one-third bigger, with a wingspan of nearly one metre (around the length of a baseball bat).

Regularly clocking speeds of over 320 kilometres per hour when diving for prey, females are faster than a Formula 1 car!

RECORD BREAKER
Frightful, a particularly speedy female, was recorded diving at 389 kilometres per hour during an experiment!

Spectacular strikes

A female reaches her top speeds during her steep dive for prey (called a 'stoop'). Rising high above her victim and tucking in her wings, she tilts her flight path to almost vertical and plummets earthwards – a furious, feathered missile ready to strike and stun her prey with a massive mid-air blow.

Queen of the chase

These birds are built for breakneck speed. While in a dive, a falcon holds her body in a teardrop shape, which reduces how much the wind slows her down. Sweptback, lightweight wings and slim, stiff feathers help with this too. Finally, a female's breastbone offers a large area for her enhanced flight muscles to attach to, giving her the crucial power to withstand the extreme wind force encountered during fast-moving flight. She's the undisputed queen of the high-speed chase!





A female feeds her chicks with fresh prey.

Spectacular sea creatures

Blanket octopus

With her shimmering multi-coloured cape billowing behind her, the female blanket octopus looks like a magnificent superheroine of the deep. Her rainbow cloak is key to not only her survival but also her very large family's!

A secret weapon

When all is well, a female blanket octopus keeps her cape rolled up out of sight and appears bluish-purple and silver. But when she's attacked by sharks or other predators, she rapidly unfurls it. Her huge, open cape makes her appear more threatening and reveals dark eye spots, called 'ocelli'. Along with the bright violets, reds, oranges and blues of the swirling cape, these spots are designed to cause alarm.

A female hides her cape until she needs it.

SWITCHING SHADES

A female blanket octopus' cape can change colour because it contains special cells called 'chromatophores'. When these cells expand or shrink, they cause her skin to shift from one shade to another.

Female blanket octopus

SIZE COMPARISON

Male blanket octopus

With swirling colours and menacing eye spots, a female's cape scares off predators and protects her family.

Close-up of blanket octopus eggs.

Giants of the deep

A female blanket octopus swims freely in her tropical home, rather than hiding for safety. She must guard and carry 150,000 small, soft eggs, so she has to be able to defend herself! Her responsibilities mean she is very different to her male partner: she's at least 100 times longer and 40,000 times heavier. Males don't have a cape and are the size of a walnut, or one of the female's eyes!

Defensive decoy

Females have another clever trick up their sleeves. When in danger, she can use her cape as a decoy, leaving it behind to grab her enemy's attention while she and her eggs make a quick getaway!

A female must keep 150,000 eggs safe.

Striking shade-shifters

Flower crab spider

Imagine being able to change your entire body colour to match your background! It's an impressive party trick, and one which female flower crab spiders perform regularly. Experts at surprising their prey, females switch between shades of yellow, cream and white to match the flowers they are hunting on. Why female flower crab spiders have this unusual colour-swapping ability, and why the smaller, darker males don't, is an unsolved mystery.



A flower crab spider can match the shade of the flower she is hunting on.

Only females of this species can change colour – easily shifting between different shades while males remain the same.

Surprising spiders

As their name suggests, this species of spider resembles a small crab – scuttling sideways and displaying their longer front legs like crabs present their pincers. Unlike most spiders, they don't weave webs. Instead, they hunt flies, butterflies and bees on flower petals, using their forelegs to seize prey.



Flower crab spiders hunt flies, butterflies and bees.

Clever chemicals

When a white female spider moves to a bright yellow blossom, her eyes sense that she doesn't look like her immediate surroundings. To correct this, her body produces pigments, including coloured chemical compounds called 'ommochromes'. In three days or less, she's the exact yellow of the petals around her!

If she later moves to a white flower, her body breaks down the yellow-causing pigments and she returns to white. This direction of colour change seems to be harder to do and takes a longer time – upwards of 11 days.



A female's body produces pigments that help her change colour.

A SCIENTIFIC MYSTERY

Scientists originally assumed that the female flower crab spider's special skill was needed to improve her chances of catching insects and help her avoid being eaten by predators. But there isn't much evidence to support this theory. Perhaps her camouflaging capability is linked to being female, as only female spiders have colour-coordinating powers.





Brilliantly bright birds

Eclectus parrot

The rich cobalt-blue, dazzling ruby and regal purple feathers of female eclectus parrots have baffled scientists for years. Female birds are usually coloured to camouflage themselves, but these females stand out from the crowd. They look so brightly coloured and so different from green male eclectus parrots that they were once thought to be a different species!



These females use their unusual colouring to gain attention, making sure everyone knows not to mess with their territory.



Eclectus parrot chicks start life with grey feathers.

Eye-catching colours

The answer to the puzzle of this female parrot's vivid colouring lies in her competitive lifestyle. Females don't build nests, instead raising their young in tree hollows in the rainforests of Indonesia, Papua New Guinea and Australia.

There aren't enough nesting hollows for every bird, so when a female eclectus parrot finds a hollow, it's vital she signals to nearby birds: 'This is mine, stay away!' Sitting in her tree, her eye-catching technicolour plumage – red, blue and purple against the green of the rainforest canopy – helps her to communicate this message as loudly as possible.



Stay away!

Once she's visually claimed her hollow, a female eclectus parrot's job is to guard her family and their home. For up to 11 months, she relies on different males to bring food to her – males are green in order to hide from predators as they search for fruit in the rainforest canopy.

A mother eclectus parrot will battle to the death to protect her chicks and her home! If another female intrudes and tries to move in, the two will fight fiercely, inflicting terrible beak injuries in brawls that sometimes end in death. Female eclectus parrots are bright, bold and brave!