

DISCOVERING GALAPAGOS



STORIES



ACTIVITIES



FACTS

The Marine Iguana



Welcome!

Welcome to the Galapagos Conservation Trust's Marine Iguana magazine. As part of our exciting Discovering Galapagos education resources, we've written this magazine for you to discover more about one of the most iconic animals of the Galapagos - the Marine Iguana. We hope you enjoy it and welcome your comments!



Who we are

The Galapagos Conservation Trust is the only charity in the UK to focus on the conservation of the amazing Galapagos Islands. Our mission is to protect the Galapagos Islands so that they can continue to be a treasure for future generations.



This magazine is one of a series created by the Galapagos Conservation Trust. Each magazine is packed full of information and activities...just for you. So what are you waiting for? Take a look at the contents list, and dive in...

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Where are we?



If you see a **highlighted** word that you don't understand, check the back pages of this magazine.

Some of you will be reading this in the UK, and some of you in Ecuador and the Galapagos Islands. How much do you know about each other and the wildlife in your own backyard?



The United Kingdom

The United Kingdom (UK) is made up of England, Scotland, Wales and Northern Ireland. It is an island nation in northwestern Europe.

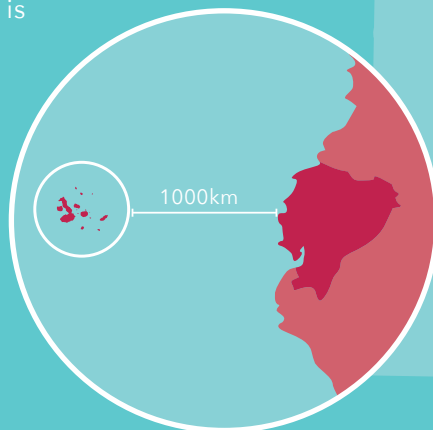


The Galapagos Islands

These volcanic islands are in the Pacific Ocean, and are part of Ecuador. We all think of Charles Darwin when Galapagos is mentioned.

Many animals and plants ended up on these islands from the South American mainland or beyond, and have evolved into different **species**.

In this magazine, you'll find out more about one such special species, the **marine iguana**.



What is conservation?

Conservation is about protecting and looking after an area, item or thing. It includes the conservation of **biodiversity** (all the different living beings on the planet), the environment and natural resources.



What is a marine iguana?

The theme for this magazine is the marine iguana, but what is it exactly? Well, it looks like a lizard doesn't it? Because it is. It's a very unique reptile too as marine iguanas are the only sea-going lizards in the WHOLE WORLD!

Marine iguanas are a **vulnerable species**. This means they're almost **endangered**, and at high risk of becoming **extinct**.

The **ancestors** of the marine iguanas were land iguanas, which came over from the mainland but had to survive and adapt for the oceans.

They are cold-blooded and so need to lay (bask) in the sunshine, to take in (absorb) the warmth from the sun. This heat energy keeps their body temperature up, helping their bodies work (such as digesting food or growing). This is why they're seen basking in the sun on exposed lava rock, raising their body temperature to around 35.5°C.

Reptiles are a group of animals, which include turtles, crocodiles, snakes and lizards.

These creatures look quite prehistoric, and almost mythical. That's probably why they've been nicknamed 'dragons'.










A cold lunch

Marine iguanas can dive down 25 metres into cold waters, on a single breath (that's around three lengths of a city bus). They can stay there for well over ten minutes...sometimes even up to 45 minutes (a whole lunch break!) before having to return to land to warm up.

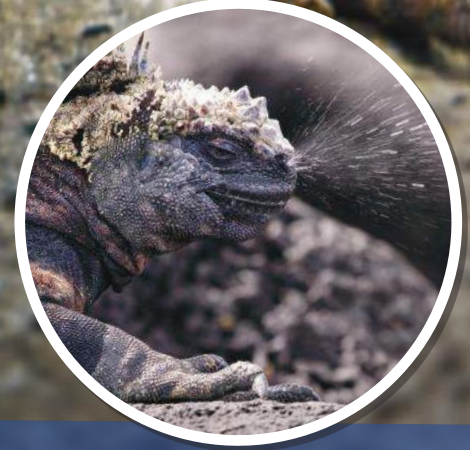
They are **herbivores**, eating red and green algae (such as sea lettuce). Red and green algae are found in cold waters. They eat underwater from algae beds, and even though they have been seen eating plants on land sometimes, they're not very good at digesting them.



	Common Name: <i>Marine iguana</i>
	Scientific Name: <i>Amblyrhynchus cristatus</i>
	Spanish Name: <i>Iguana marina</i>
	Awesome Name: 'Diving Dragons'
	Size: Up to 1.5m (depending on the island)
	Animal Class: Reptile
	Average Life Span: 5-12 years



Juvenile marine iguana



Predators

Marine iguanas have many **predators**. On land, the Galapagos hawk, cats, dogs and rats, and in the sea, several species of shark - all want to eat them! Great blue herons like to eat hatchlings (baby iguanas). The problem is that cats, dogs and rats were introduced by man. A marine iguana's life might have been a little easier if we didn't bring in more predators.

Atchoo! Bless you...

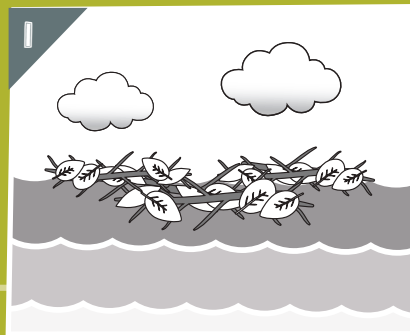
Marine iguanas can sneeze salt out of their nostrils. That is some party trick! Could you imagine doing that? They have evolved this strange adaptation to remove excess salt that they eat and drink in their marine diet. Once up on land, the salt-excreting glands in their head help them sneeze out the salt. Not fire-breathing.. but salt-sneezing dragons!

Story time: a dragon's tale



We all love stories, don't we?
Well here's one for you. Go find
a nice quiet place to sit and relax.

Are you settled and ready now
for the story?



'Look over there. Yes, there in the ocean. There's some floating plants with a few twigs. It's a raft of some kind. With a few animals...wait... i guanas on it. They can't swim, can they? They're land reptiles!'

And that's how it all began. I may be a marine iguana, but my ancestors used to live on land. A long, long, time ago.



We're talking around 8 million years ago...and there was an awful storm. Thunder, lightning, waves crashing and rolling. And the land iguanas of the South American continent, surprised everyone by floating out onto the violent seas on small pieces of vegetation: like little grassy boats. They were holding on for dear life with their small claws, because none of them could swim.



Unfortunately some drowned. It was very sad. They never got to see land ever again. But others did.

Those lucky land iguanas were so happy to see land. They scurried here and there, looking for food. Boy, were they hungry. This was a new place, they didn't know what to do. There didn't seem to be much around. And there were new animals and birds that wanted to eat them. It was terrifying. The iguanas had to hide, but also search for food or they would starve.



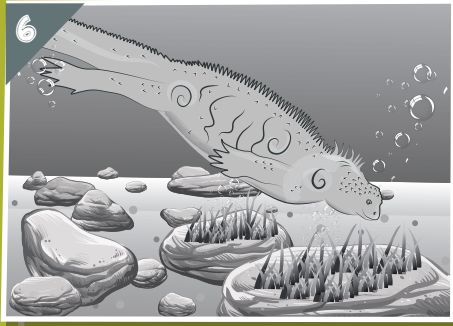
My land iguana ancestors started to eat the land plants they could find, trying a bit of cactus. It was tasty. But there just wasn't enough. Iguanas were competing for the same food.

When you're hungry, you can get pretty angry...so there were iguanas fighting one another for food. The stronger ones with sharper claws won. Others decided to look elsewhere for food.



It was then that a group of iguanas tried something new. What was this slimy plant on the rocks near the sea? Surely there's no harm in trying it, they thought. They licked it a little, took a bite...yum!

You know what it was, don't you? My favourite foods - red and green algae, of course. Delicious. Land iguanas today are missing out on such a treat. But this meant there was no competition for food anymore.



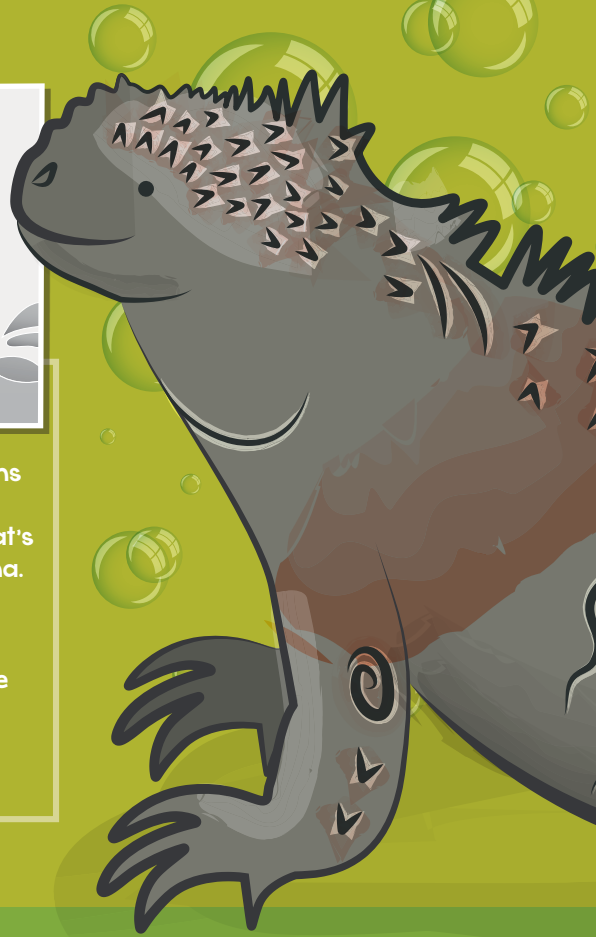
These algae-eating land iguanas were my true ancestors...they learnt to swim to find more algae. Those that were bigger, could swim better, those that had flatter faces, and longer claws (and cling to rocks), could eat more algae.

These were the iguanas that survived and their genes for such amazing features were passed down generations.



And over the millions and millions of years, we became a new species...the marine iguana. That's me! I'm one proud marine iguana.

Our lives are still hard, but it's an easy life compared to what our ancestors went through. We cannot imagine what it was like for them, having to struggle so hard to survive. Can you?



What is evolution?

Evolution is a very slow process where a species changes over **generations**. It is the reason why we see a great variety of life forms on Earth today.

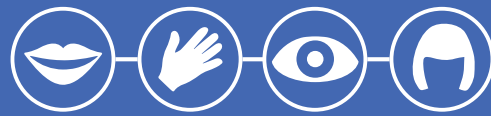


A species might need to adapt to its environment so that it can survive. This adaptation happens because of a change in their genes.

Evolution is important for a species to survive better in their environment, especially if that environment is changing. For example, when the land iguana colonised and began feeding from the black rocks along the shore they didn't want to get eaten by a greedy hawk. So they adapted to their new environment and became darker in colour and camouflaged. They passed on their 'dark, camouflaged colour' genes to their offspring, so that they too would be more likely to survive.



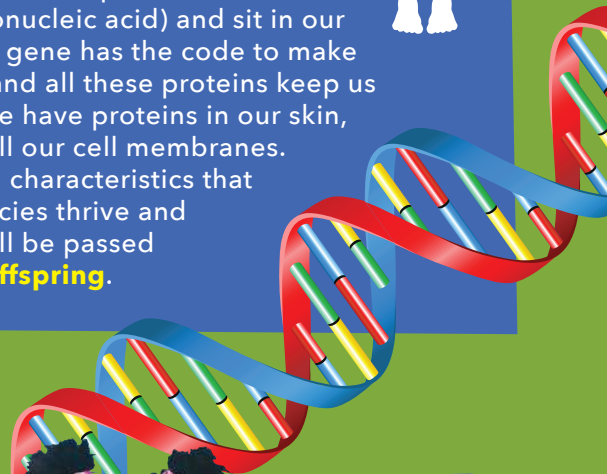
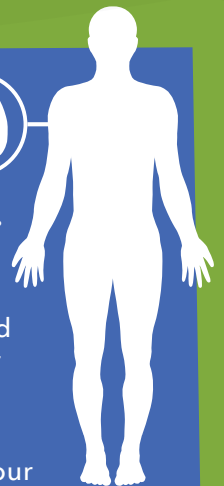
This is known as **natural selection** and is important in evolution. Charles Darwin and Alfred Russell Wallace were the first scientists to come up with this **theory**.



It's written in our genes...

What makes each of us who we are, giving us characteristics like our eye colour, hair colour and whether we can roll our tongue or not, is our genes.

Genes are made up of **DNA** (deoxyribonucleic acid) and sit in our cells. Each gene has the code to make a protein and all these proteins keep us healthy. We have proteins in our skin, hair, and all our cell membranes. The strong characteristics that help a species thrive and survive, will be passed onto the **offspring**.



What is adaptation?

Adaptation is when an organism changes in some way so that it can survive in its natural **habitat**.

Remember, evolution is a slow process. Adaptations don't happen in individuals...the changes happen over generations, through the **inheritance** of genes, from parent to child.

There are three different types of adaptation:

- **Structural adaptations:** when body parts adapt, for example: skin colour, body shape.
- **Physiological adaptations:** when there are adaptations in the way the body works, for example: making venom or slime.
- **Behavioural adaptations:** when the animal or plant changes its behaviour to survive, for example: only being active at night, swimming.



Land and marine iguanas had the same common ancestor, but **diverged** into two different species to survive. Land iguanas adapted to living on land, marine iguanas adapted to life near and in the sea.



This is my island, in the sun...

The islands with largest numbers of marine iguanas are Isabela Island, and Fernandina Island. You'll often see them crowded together on the rocks by the island shores to keep warm.

From pictures we can only see structural adaptations.



Fill in the table below with the different adaptations you have noticed, and why you think these adaptations are important for the marine iguana:

What adaptation can you see?	Reason for this adaptation

There are clues throughout the magazine too...

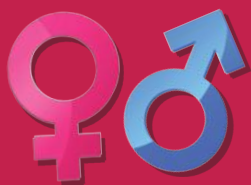


Female marine iguana



Male marine iguana

Adaptations may be slightly different between males and females of the same species.



What differences can you see between these male and female marine iguanas? Circle the differences.

What a grump!



Males are very **territorial** especially during mating season. If you see a male iguana shaking his head up and down quickly and breathing very loudly...he's not happy. You don't want to mess with him.

Pink to make the girls wink!



During mating season, male marine iguanas look brightly coloured to attract the females. Usually they're black or dark grey, as darker colours absorb the heat from the sun, so they can keep warm.

Here's a marine iguana poster to colour in, and some questions that you'll be able to answer if you've read everything in this magazine closely. Are you going to be our next marine iguana expert... a Darwin of Tomorrow? When you've finished, give your marine iguana the best name you can think of.

Why do you think only adult marine iguanas feed at depth?

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Why do they huddle together on shoreline rocks?

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Why do they sneeze salt?

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Why do marine iguanas become more colourful during the breeding season?

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How do marine iguanas' bodies help them move in the water?

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Your iguana's name:

Why do marine iguanas have long, sharp claws?

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a	a	c	j	s	y	s	s	s	p	d	n	f	c	a	n	p	y	a	s
y	n	f	o	c	o	i	p	d	g	o	r	v	m	n	o	r	d	y	t
b	c	a	j	l	e	g	b	e	i	o	a	o	o	i	i	e	r	b	a
e	e	w	u	u	d	d	a	t	c	d	d	e	c	r	t	d	a	s	r
r	u	h	x	g	a	b	a	p	a	i	r	h	k	a	u	a	z	h	j
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n	p	i	o	e	i	a	n	i	o	w	a	x	g	n	v	r	n	k	i
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o	o	n	o	d	e	r	e	r	l	a	z	d	r	g	s	a	g	s	e
c	p	n	a	h	h	e	o	r	g	i	m	e	d	i	n	g	e	u	s
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c	l	i	m	a	t	e	n	o	g	a	r	d	e	g	s	b	e	l	b
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f	m	v	l	e	w	d	k	q	o	u	l	s	z	s	x	f	g	a	b
c	b	i	o	d	i	v	e	r	s	i	t	y	i	z	c	j	s	r	h
x	x	w	v	k	q	j	r	a	k	k	s	p	w	x	u	x	p	z	e

Wordsearch

We've taken some words from this magazine (in the list below) and hidden them in this grid. Can you find the words? You can search up, down, left, right, forwards, backwards and diagonally.

adaptation	eggs	lizard
algae	evolution	marine iguana
behaviour	fernandina	mockingbird
biodiversity	galapagos	predator
cats	genes	prey
climate	hatchling	rats
cold blooded	hawk	reptile
conservation	herbivore	sea lion
darwin	heron	shark
dna	iguana marina	sneeze
dogs	Isabela	species
dragon	Islands	wallace

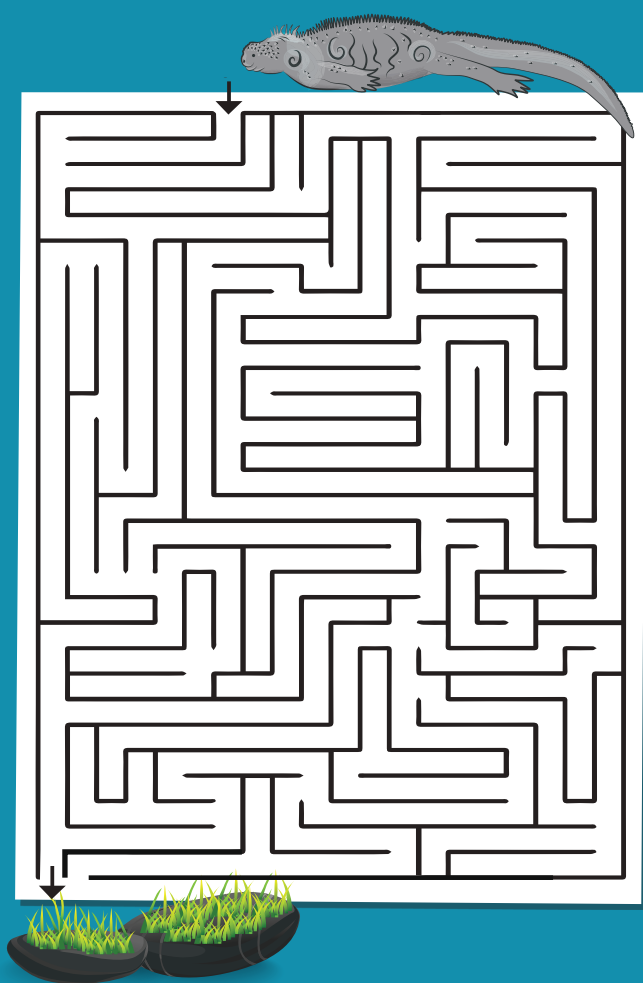
Get in touch...drop us a line...shout HELLO/HOLA!



These magazines are for made for YOU! So we want to know what you think, what you like and what you've learnt about the different species featured in each magazine.

Send us a picture of a marine iguana that you've drawn (or photographed!) and we'll share our favourite ones online. And if you don't like drawing (it's just as creative to write), why not send us a poem, story or joke instead?

Send us an email to dgmagazine@gct.org or you can find out our twitter, facebook and postal details on our website galapagosconservation.org.uk.



We've given you a lot of fun things to do in this magazine, and we're guessing you'll want to check your answers. Go to the website discoveringgalapagos.org.uk and click on 'Marine Iguana Magazine'. All will be revealed.

If there's anything else you're looking for, (perhaps you want to know if iguanas smile?) get in touch or have a look at our website discoveringgalapagos.org.uk. We're always happy to hear from readers and love sharing our enthusiasm for these creatures. (We're not sure marine iguanas actually smile...they're too busy sneezing!)

Very annoying!

Ever been irritated by someone? Iguanas have the same problem. When they're busily trying to get back to the shore from the sea, sometimes sea lions just swim up to pull their tail. Not helpful. They don't even want to eat the iguana either!



Don't kill the mockingbird!

A marine iguana's best friend is the mockingbird. Why? Because they hate the Galapagos hawk too. When a mockingbird sees the hawk it cries such a cry, signalling for the iguanas to hide. Thank you dear mockingbirds!

Lava lizards, finches and Sally Lightfoot crabs are also close friends. They sit on iguanas munching pesky flies and ticks...and dead skin! Nom nom.

Just keep swimming



How does a land reptile adapt over generations to be able to swim the seas as a marine iguana? It's in the **streamlining**!



Streamlining is when you form into a shape that makes it easier to move fast and easily through water or air with little **resistance**. Aeroplanes and racing cars are streamlined. Marine iguanas hold their legs by their side and look much thinner when they swim.

They swing their powerful sideways-flattened tail from side to side in the water, moving forward like sea snakes.

The heat is on!

Look at these mighty marine iguanas. They're quite dark in colour, aren't they?



But how and why did this skin colour adaptation come about?

Reptiles are cold-blooded...their body temperature will depend on their environment.



Cold blooded animals - body temperature depends on whether its hot or cold outside



Warm blooded animals - body temperature stays the same whether its hot or cold outside

Next time you're out in the sunshine, try a small experiment.

Find a piece of black clothing (T-shirt, trousers, hat), and a piece of white clothing. Which one do you think you will make you feel warmer? Why? Try it out and see.

Or perhaps wear a black top and a white bottoms...or the other way round. Which half of you feels warmer?

Dark colours absorb more heat than light colours. Light colours reflect heat.



- So, if you want to keep warm, which colour should you wear?
- Why is this important for the marine iguanas?
- Do you remember how reptiles control their body temperature?
- Why would swimming in cold seas be a problem for them?

Experiment



Time to think like a scientist and work out how you would run an experiment to find out which materials keep the heat the best.

You can use anything you like...but we'll give you some ideas for equipment below, because we're nice like that.

- Thermometers
- Pieces of different coloured material
- Desk lamp

How will you make sure it's a fair test?

If you have access to a computer at home or at school, take a look here for further galapagosconservation.org.uk/teacher-zone/.

Use the space below to record your findings:

Show off!

Male marine iguanas have larger crest spines down their back, which is partly for protection, but partly to display how great they are.



Food chains

All living **organisms** need energy to grow and survive. **Producers** are organisms, such as plants, that get their energy from the sunlight through a process called **photosynthesis**. **Consumers** are animals that eat plants or other animals.



This is an example of a food chain. The producer here is wheat, and the consumers are the mouse and the owl. Because a mouse eats a producer, it is a primary consumer...the 'first eater'. As an owl eats the mouse (and does not directly eat the wheat), it is a secondary consumer. The owl is also the **apex predator**. An apex predator does not have any predators. It sits at the top of the food chain.

Some food chains are short, like this one. Others are longer with more species. The arrows show the direction of energy flow. ▶ ▶

Below are some images of species you'll recognise from earlier in the magazine. But who eats whom?

If you don't want to ruin your magazine by cutting out the images, trace them onto a separate sheet of paper and cut those out.



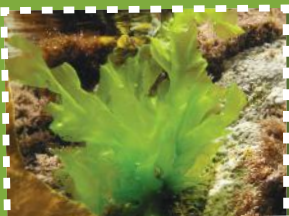
Bigger is better!

Wherever there is more underwater algae, marine iguanas will grow bigger. They eat more. So iguanas are bigger on some islands than others. The tiniest ones (less than 1 kg) are on Genovesa Island, and the largest (up to 12 kg) are on Fernandina Island.



Bigger adults are stronger swimmers and can deal with the cold water, powerful crashing waves and heavy currents. Iguanas that don't swim and stay on shore, can't eat the algae, and don't grow very big.

Females like bigger males, and bigger females lay the healthiest, best eggs. (And they can fight for the best nesting places too).



Green sea lettuce



Galapagos hawk



Bacalao grouper



Razor surgeonfish



Galapagos blue heron



Galapagos shark



Marine Iguana



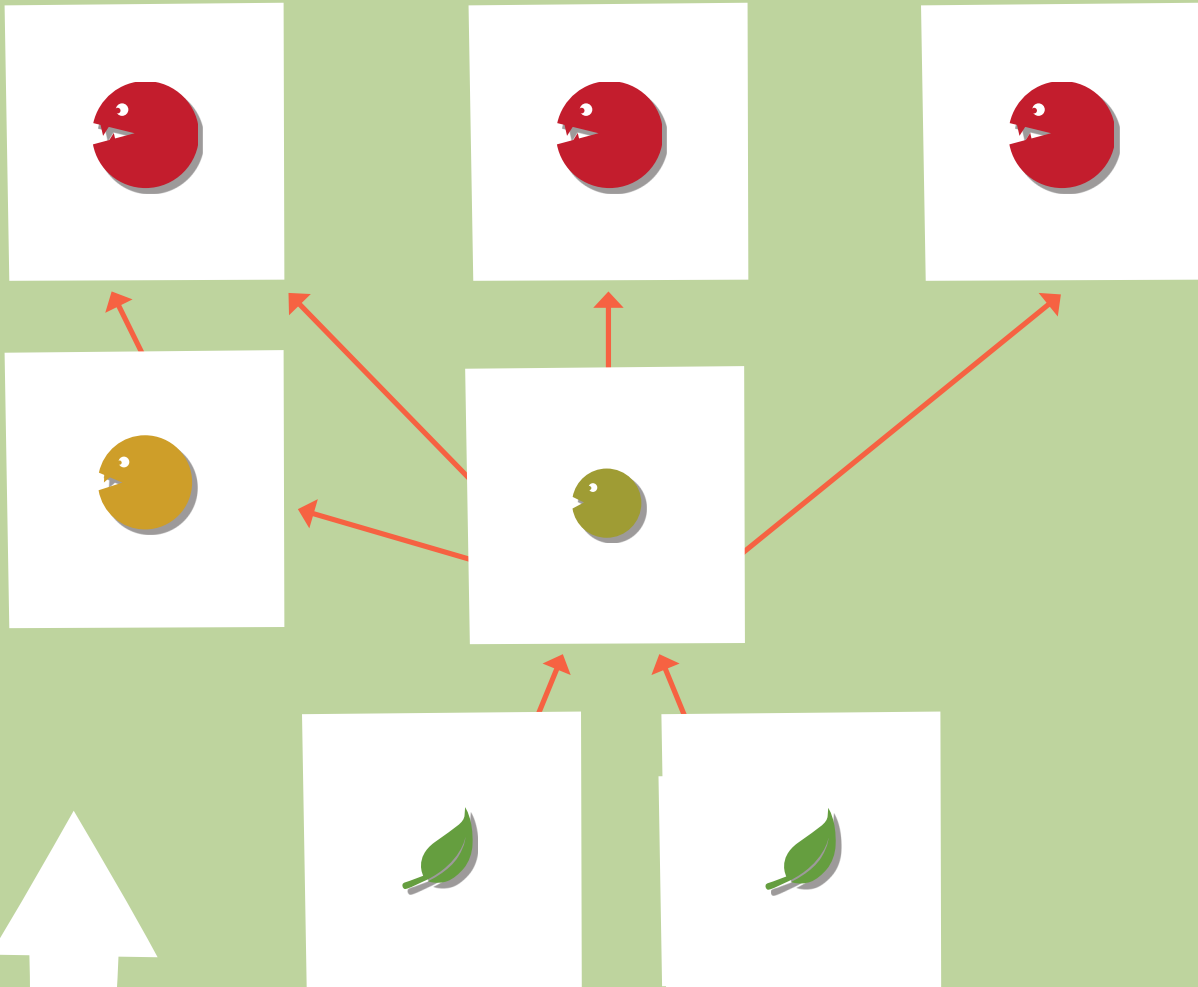
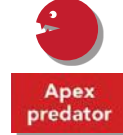
Red algae



Where do you think each species sits in the food chain? Cut the images out and place them, or draw them into the blank spaces given. You won't need to use all of them. How many different food chains can you make?



Add a 'P' next to the ones you think are producers and a 'C' next to the ones you think are consumers.



Invasive species can cause problems in food chains. An invasive species is one that is introduced to an ecosystem by humans and causes damage to it. Invasive species such as cats and dogs have also become predators of the marine iguana. What effect do you think this has had on the marine iguana population?

Flat face

Marine iguanas are funny. They're clumsy running on land, needing their tail for balance, but swim gracefully underwater. They also have a squished nose making it easier to graze the tough algae stuck to rocks, with their razor-sharp teeth.

The case of the shrinking dragons

Sometimes odd things happen in scientific research, especially when you're studying wildlife. We can't always explain what's going on, but we can make lots of observations, take measurements and try to come up with a theory.

Let's join our investigator and see if we can help.



Almost a year ago I was called to the Island of Fernandina, where I found my favourite reptiles, Iguana marina.

Such beautiful creatures, I began to take measurements of their length and tag each one with a set of coloured beads. We can sew a different pattern of beads into an

iguana's crest, as the spines are like human nails, so they can be decorated for identification purposes, without causing any pain.

Today I returned, and measured their lengths again. They look different. Can you measure them for me too, to check I'm not mistaken?

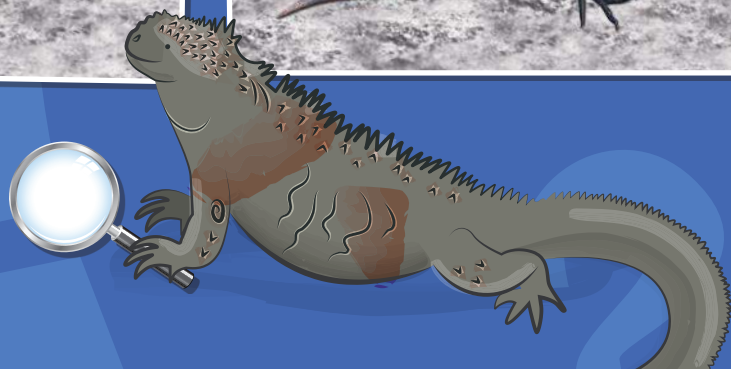


Before (2015)



After (2016)

10mm



My measurements

Marine iguana individual	Before picture (2015) measurement	After picture (2016) measurement	Change in measurement
● Red bead	60mm	54mm	6mm
● Green bead	70mm	62mm	8mm
● Blue bead	65mm	60mm	5mm
● Yellow bead	80mm	71mm	9mm



What can you see in the results?
I know there was a food shortage
in the time I have been away.

Could that have anything to do
with it? What do you think has
happened? Find out more below!

What is El Niño, and what does this mean for the marine iguanas?

Every two to seven years there is a warming of Pacific Ocean waters, and the moving of these waters to the West that surround the Galapagos Islands. On land rainfall is heavier, which is good news to many species as food becomes plentiful. However in the ocean food becomes more scarce and there is a loss of red and green algae.

So iguanas lose their food, and over half of them can die from hunger. But some iguanas just become shorter. They shrink! They actually become tinier versions of themselves. And still survive!

Smaller iguanas can survive because they don't need as much food, and don't use as much energy. Female iguanas can shrink more than males, so more females survive.

What's amazing is how they're able to do this. Scientists have found that adult marine iguanas can shrink their tissues and bones...but then grow it all back again when there's more food around again. They can grow and shrink in size depending on the environmental conditions.

Unfortunately our bones won't let us do that, but imagine if humans could shrink too...



As the climate gets warmer, there will be more El Niño events (and maybe even other stronger events). Who knows how long the marine iguanas will be able to keep shrinking their skeletons?

Ain't no mountain high enough...

Marine iguanas have been known to climb trees or even prickly, spiny cactus plants, just to catch some rays of sunshine. Ouch!



Claw-abiding citizens.

The claws of a marine iguana are creepily long and sharp. All the better to cling onto slippery rocks with (either underwater when swimming against heavy currents, or on land). They fight using their claws too, and females use them for digging nest holes.

Their cousins, the land iguanas, have shorter claws, as they climb trees instead. Totally clawsome!



Darwin of today:

Amy MacLeod, Scientific Researcher

Just because Darwin, and scientists from years ago aren't around anymore, doesn't mean scientific research doesn't happen. There are plenty of scientists working on the Islands and all over the world in evolutionary science and conservation. And we want to introduce you to them.

So today, let's meet Amy and ask her a few questions...

What was the best thing you ever discovered?

In 2014 we set out to look for iguanas on the eastern side of San Cristobal Island, which is rarely visited because it's hard to safely get there. Nobody had surveyed for marine iguanas there before.

What do you do?

I am a Zoologist, this is a Biologist who focusses on studying the animal kingdom. For the last few years I have studied Galapagos marine iguanas to try and learn more about their evolution and conservation.

What is your normal day like?

I mostly work at a computer, analysing data or writing about results so that we can publish studies and share our work. Some days I also do laboratory work. My favourite days are during the field season - then a typical day would involve waking up around 05:30, taking a boat out to a sampling site around 06:30 and surveying, catching and sampling marine iguanas until around 15:00, then returning again with the boat. These days are tiring, but really exciting, and we get to see a lot of other wildlife too.

Why did you want to study marine iguanas?

I find marine iguanas really fascinating - they are the only sea-going lizards in the world and they have a lot of remarkable adaptations. Since we still have much to learn about them, there is a real chance to make exciting new discoveries. Plus, I get to work on the Galapagos Islands, which is one of the most amazing places in the world.

When did you get interested in science?

I became interested in Science at school, but I have been fascinated by animals for as long as I can remember, so I think the Zoology came first.

What is the funniest thing that ever happened to you when you were doing your research?

Getting on and off boats with equipment can be difficult. At the end of one long day in the field, we were getting off the boat in calm water at a good pier in the town. One member of the team somehow missed the pier and instead stepped straight into thin air, falling into the sea without making a sound. She floated back up instantly, still holding all the equipment exactly as she had fallen and looking very surprised. Once we got her out and was sure she was fine, we could all see the funny side. The local audience enjoyed it too.

What do you like to do when you're not working?

I love to travel and see the world, and I also really like to take photographs, this can be combined quite well with fieldwork. I also really enjoy cycling, reading, watching films and live music concerts.

If you have a question you'd like to ask Amy drop us a line at dgmagazine@gct.org and we'll add the answers to Discovering Galapagos to share with everyone.

FACT FILE

I studied at: a few universities in the UK, the USA, the Netherlands and Germany, where I studied Zoology, Ecology, Evolution and teaching.

My favourite subject at school was: I can't pick just one, but I loved Science and Art the most.

Interesting fact about me: I once got attacked by someone's pet leopard in Africa, I was ok eventually, but I don't recommend coming close to big dangerous animals, no matter how tame they are supposed to be!



amy-macleod.com

Further information



We're nearing the end of the magazine, but this doesn't mean the learning has to stop. There's plenty more to be discovered, so we thought we'd share something extra with you...

This isn't the only magazine...or the only species...

We have much more to give! Have a look at our website galapagosconservation.org.uk for more details on the marine iguana, for facts and images of other Galapagos species, and to get copies of other magazines in this series!

Scientific vocabulary



Science can feel like a foreign language, and there may be words in this magazine that you've never seen before. To help you, we've added them here with short descriptions. There are more words online too at discoveringgalapagos.org.uk.

Ancestor

Someone from whom you have descended (come from). Your parents, grandparents, great grandparents and beyond, are your ancestors. You are a descendent of your ancestors.

Biodiversity

All the plants and animals in a certain habitat or the world.

Diverged

Comes from 'divergent evolution' where one species has split up into groups. Over millions of years, these groups become separate species.

DNA

This stands for deoxyribonucleic acid, and every single cell in your body has the same DNA. It is a code, a blueprint, that makes you, YOU!

Endangered

Used to describe a species that is likely to become extinct.

Evolution

A very slow process where a species changes over generations.

Extinct

When there are no more organisms of that species.

Generations

As each set of parents produce offspring, they are starting the next generation. You belong to a different generation from your parents.

Habitat

A place where an organism lives.

Herbivores

Organisms that eat plants.

Inheritance

When something (in this case, genes) are passed on to the next generation. An offspring inherits its parents' genes.

Native

Used to describe species that occurred or developed in an area naturally.

Natural selection

This is when individuals that survive (based on their successful and useful features) go on to breed and these features continue into future generations. It is an important part of evolution.

Nutrients

Important things in foods that help us grow. Examples of nutrients are carbohydrates, vitamins and minerals.

Offspring

The babies or children.

Organism

Any living thing, such as animals, plants or bacteria.

Photosynthesis

The process where plants can use sunlight to convert carbon dioxide and water into sugars (glucose) to help the plant grow.

Predator

An organism that hunts for food (prey).

Resistance

Air resistance or fluid (water) resistance is a type of friction, a force that stops you from moving through air or fluid.

Species

A group of organisms that can breed with each other to give viable offspring. For example: a horse and a donkey are different species because if they bred, the offspring would be a mule. Mules are not viable, as they are unable to breed with horses, donkeys or other mules to produce offspring.

Territorial

When an organism fights for, or marks, an area of land or sea as its own (its territory).

Theory

An idea used to explain what we see happening in a scientific study. Further scientific tests need to be done to prove the theory is correct or incorrect.

Vulnerable

Used to describe an organism in need of special care. A vulnerable species is one that is likely to become endangered, and possibly extinct.

For parents and carers:

If you are a parent or carer, why not read through this magazine with your child and work through the activities together. Learning with a parent (and siblings) helps children remember key facts and adds to the enjoyment of the experience.

If you would like further information to help guide your child through this magazine, to obtain copies of the other magazines in this series, or to follow up your child's interests, please have a look at our website: discoveringgalapagos.org.uk or get in touch with us at the Galapagos Conservation Trust via the details on galapagosconservation.org.uk.

For teachers:

If you are a teacher of children aged 7-13 years old, do get in touch with us at dgmagazine@gct.org as we have Teachers' Notes available to use in your classroom alongside these magazines.

'Cherish the natural world, because you're a part of it and you depend on it.'

- Sir David Attenborough



This educational magazine will entertain all children aged 7-13 on the topics of evolution, conservation, natural and geographical sciences.

Each magazine follows a theme of a particular species living on the Galapagos Islands; this time it's the **marine iguana**.

