

## The

### UNIVERSITY of TASMANIA



# WONDER WEEKLY FREE COPY

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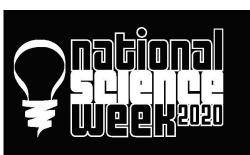
August 17, 2020

What is your favourite animal? Page 2



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It's a big week for the curious: Page 2





WHAT do wombats, mountain lions, mosquitoes, mice and frogs have in common?

Well one answer would be Dr Scott Carver, lecturer in wildlife ecology in the School of Biological Sciences, at the University of Tasmania. Scott has studied all these animals and many more.

"I have been lucky to have

worked with a lot of different animals through my own research and also helping other people with theirs," he said.

"To name a few - wombats, mountain lions, mosquitoes, mice, tiger snakes, blue tongue lizards, bats, platypus, frogs; the list goes on and on.

"At the moment wombats are probably my favourite, but I like all animals, no matter what they are."

As a wildlife ecologist and epidemiologist, Scott studies the pathogens, such as viruses and mites, that cause diseases in animals.

"When I was in school I wasn't certain what I wanted to do, but had an interest in animals," he

"When I started university I wanted to become a zoo keeper, then I later wanted to work for a conservation organisation, and then ultimately I became a scientist in a university."

While Scott is based at the University of Tasmania, where he teaches biology, his research spans the globe.

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GLOBETROTTER: Dr Scott Carver with a young mountain lion.



RESEARCH CAT: A mountain lion fitted with a tracking collar to study its movements and interactions with other animals.

MOUNTAIN lions (also known as pumas or cougars, and by many other names) can be found throughout much of North and South America.

In the United States they are mainly confined to the west.

While they vary greatly in size, mountain lions are the fourth largest of the cat family, and males can weigh up to 100 kilograms and measure 2.75 metres.

They are ambush predators, can jump up to 13 metres and reach speeds of up 80

kilometres per hour. Mountain lions are solitary animals, have excellent vision and hearing, and avoid human contact.

All of these characteristics make them hard to research.

Wildlife ecologist and epidemiologist Dr Scott Carver, from the University of Tasmania, has been involved with a team of researchers studying mountain lions in Florida, Colorado and California.

"One major area of investigation has been around trying to

understand virus transmission among mountain lions," Scott said.

"We have also done quite a lot of work to show that mountain lions occasionally acquire viruses and bacteria from people's domestic cats."

This research has included the use of tracking devices.

"We work with some really amazing mountain lion biologists who put tracking collars on them to study their territories, home ranges, patterns of movement and

interactions," Scott said.

"You need very experienced people to work safely with such powerful animals.

"All of the catching work we have done with mountain lions has been very safe, both to the mountain lion and the people involved.

"When working with mountain lions you often have to anesthetise them while they are up a tree, so one of the most difficult parts is retrieving the mountain lion, who is asleep on a branch up the tree."

#### Busy world of wildlife researcher

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Scott said researching animals takes time, and it is rewarding when that time and effort makes a difference for an animal.

"My students, collaborators and I have been studying the genetics of bobcat populations in Los Angeles for more than a decade," he said.

"Our research has shown that highways fragment bobcat populations, but some bobcats will still cross major roads - even ones with 10 lanes of traffic."

This work has led to the building of wildlife corridors under highways.

Back in Australia, Scott is currently involved with testing new treatments for wombats with a disease called sarcoptic mange, and Tasmanian devils with Devil Facial Tumour Disease.

"Diseases are very difficult to manage in wildlife populations and we are really at the forefront of global research on wildlife disease management in Tasmania," he said.

You can help our native animals as well.

If you see a Tasmanian animal which appears to be sick or injured, contact DPIPWE's Injured and Orphaned Wildlife program on 6165 4305 or Bonorong Wildlife Rescue on 0447 264 625 (all hours).

#### Which animal interests you the most of all?

If you were a wildlife ecologist or biologist, what animals would you want to study?

Would you like to research Tasmanian natives, or animals beyond our shores.

Perhaps you would like to be

involved in researching mountain lions and bobcats in North America, like Dr Scott Carver from the University of Tasmania. Or perhaps the work of some of the other University of Tasmania scientists you have read about in presentation about it. The Wonder Weekly has

sparked your interest:

- Dr Jemima Stuart-Smith, who is working with a team of researchers to save the endangered Red Handfish.
- Emu reseachers Tristan **Derham and Matthew** Fielding.
- Dr James Pay, who is

studying wedge-tailed eagles.

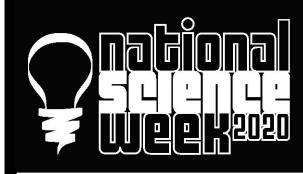
- 'Bug Girl', AKA PhD student in entomology, Shasta Henry.
- Professor Mark Hindell and his research into Antarctic mammals.

Your challenge is to choose a wild animal you would like to study and produce a

You might like to provide your reasons for choosing the animal, and some interesting facts about the animal.

Perhaps draw a picture of your animal and present your findings in a creative way.

Children's University Tasmania members can earn stamps in their passports for this challenge, at the discretion of school coordinators.



#### Peter Underwood Centre to host interactive, STEM presentations

DON'T miss the opportunity to join in some of the many activities happening during National Science Week.

The annual celebration of wonder, curiosity and inventiveness began on Saturday, and will continue through to Sunday, August 23.

If you didn't pick up a copy of Science at Home, the event guide for Tasmania, you can download it here:

www.scienceweek.net.au/wp-

content/uploads/2020/07/ Science-Week-Tas-Program-2020-DIGITAL.pdf

There are a number of activities provided by Children's University Tasmania Learning Destinations.

The Peter Underwood Centre is offering five STEM-based broadcasts this week.

The series, STEM Alive for Kids, will be broadcast via Zoom Webinar, and feature presentations about

entomology (insects), volcanology (volcanoes), ornithology (birds), plant science, zoology (animals), medical science and more.

While the presentations will be aimed at Year 3-6 students, curious people of all ages are sure to find the sessions interesting.

For more information, and/or to register for a session follow

https://bit.ly/3ioUvr9