

Slow Italian, Fast Learning

Ep.382: Hello possums: authorities race to protect new population of Leadbeaters found in NSW

Italian	English
<p>Fred Ford è il responsabile delle specie minacciate presso il Dipartimento per il cambiamento climatico, l'energia, l'ambiente e l'acqua del New South Wales.</p> <p>Fred stava esaminando centinaia di migliaia di immagini quando ha visto qualcosa di incredibile.</p> <p>"It just instantly struck me what it was. I was, sort of, sitting here shaking for some time."</p> <p>Stava guardando una foto di un opossum Leadbeater, una specie che si riteneva estinta nel New South Wales da molto tempo.</p> <p>Si credeva che fosse estinta anche nel Victoria, finché non fu riscoperta nel 1961 e elevata allo status di emblema faunistico di quello Stato.</p> <p>Il Victoria continua a classificare la specie come in pericolo critico di estinzione e Fred non si aspettava di trovare questo particolare opossum a centinaia di chilometri dalla sua posizione conosciuta più vicina.</p> <p>"You can confuse these guys with sugar gliders if you're not looking for them. But if you've got the search pattern in your brain and you're sort of open to the fact that something unusual might be there, you know what it is, but there's absolutely no way I was going to start ringing people up and saying, 'hey, I've found a Leadbeater's possum' until getting it confirmed by David Lindenmayer and Dan Harley as the species experts that have been working on these</p>	<p>Fred Ford is a Senior Threatened Species Officer with the New South Wales Department of Climate Change, Energy, Environment and Water.</p> <p>He was sifting through hundreds of thousands of images when he saw something incredible.</p> <p>"It just instantly struck me what it was. I was, sort of, sitting here shaking for some time."</p> <p>He was looking at a photo of a Leadbeater's Possum, a species that's been presumed extinct in New South Wales for a very long time.</p> <p>It was believed to be extinct in Victoria too - until it was rediscovered in 1961, and elevated to the status of that state's faunal emblem.</p> <p>Victoria still lists the species as critically endangered - and Mr Ford wasn't expecting to find this particular possum hundreds of kilometres from its nearest known location.</p> <p>"You can confuse these guys with sugar gliders if you're not looking for them. But if you've got the search pattern in your brain and you're sort of open to the fact that something unusual might be there, you know what it is, but there's absolutely no way I was going to start ringing people up and saying, 'hey, I've found a Leadbeater's possum' until getting it confirmed by David Lindenmayer and Dan Harley as the species experts that have been working on these</p>



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Il professor David Lindenmayer lavora presso la Fenner School of the Environment and Society dell'Australian National University.

"Okay, so Leadbeater's possum is about 120 grams as an adult. So if you think about that, that's about four Leadbeater's possums makes it punnet of margarine in terms of body weight. So it's a small animal that will fit in the palm of your hand, and it's got a very characteristic long tail that's pinched at the base where it attaches to the body and then it looks like a little baseball bat that's sort of club shaped."

Decenni fa, gli opossum Leadbeater sono stati argomento della tesi di dottorato del professor Lindenmayer.

Lindenmayer ha trascorso molto tempo alla loro ricerca nel Parco Nazionale Kosciuszko, dove ora è stata scoperta la specie.

DAVID: "And sadly I didn't find any animals. I did lots of spotlighting with a very powerful light. At nighttime, I mimicked the alarm calls of animals because that often brings them in."

TEE: "What does the alarm call sound like?"

DAVID: The alarm call sounds like this. I'll mimic it for you. It goes ** and it's made by adult animals in a colony. So Leadbeater's Possum lives as a colony of up to 12 individuals."**

Fred Ford ha confermato che non si sa quanti opossum Leadbeater vivano nel Parco Nazionale Kosciuszko.

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Decades ago, Leadbeater's possums were central to Professor Lindenmayer's PhD.

He spent a long time looking for them in Kosciuszko National Park, where the species has now been discovered.

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Fred Ford says it's not known how many Leadbeater's Possums are living in Kosciuszko National Park.

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<p>Quelle telecamere riprendono qualsiasi specie passi di lì, quindi gli scienziati tengono d'occhio tutti i tipi di specie.</p> <p>Uno dei modi in cui gli scienziati sanno cosa cercare è esaminando la dieta dei predatori, in questo caso i gufi.</p> <p>"So, the prey remains of owls that have eaten something, they eat their prey whole, and then they regurgitate the bones into the caves at Yarrangobilly Caves when they're roosting during the day in the dark. And there's a whole bunch of other species in those bone deposits sitting on the surface. And we've dated them and know that they're less than 200 years old. So we know that naturally there's a number of species which have never been recorded in the area that could be recorded."</p> <p>Ora che l'opossum Leadbeater è stato registrato, Ford sta setacciando gli archivi storici alla ricerca di altri esemplari con l'aiuto dell'intelligenza artificiale.</p> <p>Il suo team sta inoltre avviando un programma di lavoro sul campo.</p> <p>"So the two sites that we now have images from, they're already almost 30 kilometres apart and they're in what is a fairly common and widespread forest types through Kosciuszko and some of the adjoining national parks and state forests. So the potential search area is vast, certainly tens of thousands of hectares distributed over almost 150 kilometres or pushing up towards a hundred kilometres definitely."</p> <p>Un team composto da 10-15 persone, alcune delle quali provenienti da altri Stati, installerà e monitorerà fino a trecento telecamere.</p> <p>Non appena i ricercatori avranno un'idea più chiara della distribuzione delle popolazioni di</p>	<p>Those cameras will pick up any species that passes by, so scientists keep an eye out for all kinds of species.</p> <p>One of the ways scientists know what to look for is by examining the diet of predators - in this case, owls.</p> <p>"So, the prey remains of owls that have eaten something, they eat their prey whole, and then they regurgitate the bones into the caves at Yarrangobilly Caves when they're roosting during the day in the dark. And there's a whole bunch of other species in those bone deposits sitting on the surface. And we've dated them and know that they're less than 200 years old. So we know that naturally there's a number of species which have never been recorded in the area that could be recorded."</p> <p>Now that the Leadbeater's Possum has been recorded, Mr Ford is now sifting back through historical archives to search for more individuals with the help of A-I.</p> <p>His team is also launching a program of field work on the ground.</p> <p>"So the two sites that we now have images from, they're already almost 30 kilometres apart and they're in what is a fairly common and widespread forest types through Kosciuszko and some of the adjoining national parks and state forests. So the potential search area is vast, certainly tens of thousands of hectares distributed over almost 150 kilometres or pushing up towards a hundred kilometres definitely."</p> <p>A team of 10 to 15 people - including some from interstate - will set up and monitor up to three hundred cameras.</p> <p>As soon as researchers have a clearer idea of where the possum populations are, they'll start implementing plans to protect them.</p>
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<p>opossum, inizieranno ad attuare piani per proteggerle.</p> <p>Sebbene i possum di Leadbeater vivano nella fascia media della foresta, sono comunque esposti a una minaccia significativa da parte dei predatori selvatici.</p> <p>"And when they do come to the ground, they're exposed to things like cats and foxes, which is one of the things that's probably affecting their population size. And that's where the relationship to management really comes in."</p> <p>Una di queste pratiche di gestione è il controllo degli incendi.</p> <p>"We know that we need to think about how we're burning when we're burning and what we do after a burn or after a wildfire as well in terms of following those things up with predator management, that means that if possums are forced to come to the ground because they don't have that mid story, that they're protected as much as we can from those sorts of threats."</p> <p>Un altro modo in cui i biologi stanno lavorando per proteggere la specie è attraverso l'allevamento in cattività.</p> <p>C'è un santuario a Healesville, gestito da Zoos Victoria, dove Darcy Watchorn è un biologo specializzato in specie minacciate.</p> <p>"Since 2012, the zoo established a conservation breeding programme looking to improve both the rate of breeding and also the genetic diversity of the species. And it's taken a little while to have some success, but just recently we have finally started to crack the code with lead be's possum breeding."</p> <p>Il santuario ospita attualmente 31 opossum Leadbeater.</p>	<p>Although Leadbeater's Possums live in the mid-storey, they still face a significant threat from feral predators.</p> <p>"And when they do come to the ground, they're exposed to things like cats and foxes, which is one of the things that's probably affecting their population size. And that's where the relationship to management really comes in."</p> <p>One of those management practices is controlled burning.</p> <p>"We know that we need to think about how we're burning when we're burning and what we do after a burn or after a wildfire as well in terms of following those things up with predator management, that means that if possums are forced to come to the ground because they don't have that mid story, that they're protected as much as we can from those sorts of threats."</p> <p>Another way biologists are working to protect the species is through captive breeding.</p> <p>There's a sanctuary at Healesville, run by Zoos Victoria, where Darcy Watchorn is a Threatened Species Biologist.</p> <p>"Since 2012, the zoo established a conservation breeding programme looking to improve both the rate of breeding and also the genetic diversity of the species. And it's taken a little while to have some success, but just recently we have finally started to crack the code with lead be's possum breeding."</p> <p>The sanctuary currently has 31 Leadbeater's Possums.</p>
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Finora sono riusciti ad allevarne uno, ma dopo aver modificato la loro dieta a base di linfa e insetti, sperano di poterne allevare altri presto.

Il santuario ha anche trasferito alcuni opossum per cercare di creare altre popolazioni, nel caso in cui un incendio o animali selvatici dovessero distruggere una delle poche roccaforti rimaste nello Stato di Victoria.

"Both transplant patients were going really well, as I said, that there was good site fidelity and possums were lacking breeding, but then they fell over really quickly once feral cats most likely clued into them."

Un altro motivo per cui il santuario è così importante è che anche la piccola popolazione di opossum che sopravvive nel Victoria è minacciata dal declino della diversità genetica.

I ricercatori sospettano che una delle due sottospecie presenti nel Victoria sia ridotta a 30 o 40 esemplari.

Il santuario sta lavorando per aumentare la diversità genetica attraverso l'incrocio delle due popolazioni e ha anche creato una nuova riserva recintata per stabilire una popolazione protetta in natura.

Stanno aspettando con ansia di saperne di più sulla genetica della popolazione scoperta nel New South Wales, lavoro a cui parteciperà il professor David Lindenmayer.

"So hopefully in the next year or so, my little group of scientists and New South Wales Park Service will be able to work together to make sure that we can secure this population, which is not likely to be very large. And it's quite likely to be a separate subspecies from the ones in

They've managed to breed one so far, but after changes to their diet of saps and insects, they're hopeful of breeding more soon.

The sanctuary has also translocated possums to try and establish more populations, in case fire or feral animals wipe out one of the few remaining Victorian strongholds.

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Another reason the sanctuary is so important is because the small population of possums that survive in Victoria are also threatened by declining genetic diversity.

Researchers suspect one of the two subspecies Victoria hosts is down to 30 or 40 individuals.

The sanctuary is working on boosting genetic diversity by inter-breeding the two populations, and they've also set up a new fenced reserve to establish a protected population in the wild.

They're waiting anxiously to learn more about the genetics of population discovered in NSW, work Professor David Lindenmayer will be part of.

"So hopefully in the next year or so, my little group of scientists and New South Wales Park Service will be able to work together to make sure that we can secure this population, which is not likely to be very large. And it's quite likely to be a separate subspecies from the ones in Central Victoria, because it's such a long way away."



<p>Central Victoria, because it's such a long way away."</p> <p>L'incredibile scoperta ha suscitato grande entusiasmo tra scienziati e ambientalisti.</p> <p>Ma ha anche riaperto l'appello per una maggiore protezione di una delle creature più a rischio di estinzione al mondo.</p> <p>"I think to quite important to really highlight that their discovery in New South Wales really shouldn't have any impact on the conservation actions that are underway for the Victorian populations because those threats are so perverse and the population is so imperilled."</p>	<p>The unlikely discovery has caused huge excitement among scientists and conservationists.</p> <p>But it has prompted renewed called for greater protection for one of the world's most endangered creatures.</p> <p>"I think to quite important to really highlight that their discovery in New South Wales really shouldn't have any impact on the conservation actions that are underway for the Victorian populations because those threats are so perverse and the population is so imperilled."</p>
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Report by Tee Mitchell for SBS News.

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