

A high-pitched hum is the only indication of the mosquito's presence in the absolute darkness of a Tasmanian Forest. So small and agile, it is almost invisible to the many animals out in search of Food. It flies through the night, completely unaware that it is now the prey. Death comes on a rustle of leathery wings, the unwitting insect no match for the acrobatic skills, athleticism, and speed of the extraordinary predator who snatched him from the air. That predator is one of eight species of microbats found on this island at the bottom of the world.

As one of the most abundant and diverse groups of mammals on the planet, bats play a critical role in pollination, seed dispersal, insect control, nutrient distribution, and more. In the case of microbats, this is all achieved in a body weighing twenty-one grams or less. With a lifespan of up to twenty years, they can establish incredibly strong social and family bonds.

Sadly, however, despite their ecological importance, macro- and microbats are often not treated with the same love and adoration as other species. Microbats most commonly come into care as a result of dog and cat attacks, being trapped in buildings and sheds, wing damage sustained during bad weather and a range of human-related activities. They are often caught by insect traps, barbed wire fencing or bird netting. Sometimes, they are simply batty, like

deciding to come to ground in the middle of a busy shopping precinct.

Their specialised flight and hunting techniques require the highest fitness level in the wild, but after just two weeks in care, a microbat loses much of the muscle tone needed to fly from its roost each night and hunt effectively. Research shows they starve to death when they are not up to those demanding standards. To regain peak strength, bat species require a space that reflects an area of the sky they usually occupy, with some larger bats, such as the eastern falsistrelle (Falsistrellus tasmaniensis), not the most agile of fliers, requiring 8m² to complete a turning circle. It can take several months of solid flying before muscle tone returns, and they are as agile and manoeuvrable as they used to be. Becoming flight-ready, however, is virtually impossible in a domestic rehabilitation context. So

ideally, once bats are nursed back to health by wildlife rehabilitators, they are transported to an aviary, where they practise flying and hunting. In Tasmania, no such facility existed until now

The Tasmanian Wildlife Rehabilitation Council's purpose-built Microbat Flight Training Centre, located south of Hobart, Tasmania, will soon be ready for its first residents. Not even a pandemic could stop its contstruction, although it certainly had a red hot go. Red tape associated with the build, in regular times, would be inconvenient, but during COVID-19, it became interminable. As lockdown began to bite, permits and other requirements were delayed to the point that when they did finally come through, many builders were committed to two years' worth of government-sponsored work and thus unavailable. There were also difficulties obtaining building supplies because of accelerated statewide construction or pandemic-related disruptions to freight into Tasmania.

Fortunately, these tiny animals inspired tremendous efforts from many wonderful, like-minded people.

Top: The lesser long-eared bat [*Nyctophilus geoffroyi*] weighs in at just eight to ten grams and is common in urban areas. Image: Tracey Bagger.







At thirteen grams, the Tasmanian long-eared bat [Nyctophilus sherrini] is the state's only endemic bat species. It is a lower flier, snatching insects from vegetation. Image: Michelle Girouard.

Bat carers Ebony and her father Peter assisted with the initial planning and permit stages, while the Sorell Council team helped with legalities. Heather in New South Wales and Rachel in Queensland generously shared their knowledge and experience of the process after constructing their own bat aviaries. The actual construction was undertaken by Graeme Cure of Peace of Mind Building, who travelled hundreds of kilometres from one end of the state to the other to complete the aviary.

The Tasmanian Wildlife Rehabilitation Council is extremely grateful to a local bat carer and vet nurse who has volunteered to manage the building and the bats coming into the Microbat Flight Training Centre, and to members and supporters who donated funds to the facility. The Council is also appreciative of the Australian Wildlife Society's support combined with their patience through the delays and hurdles of COVID-19.

Thanks go to many local volunteers and supporters for creating a life-changing sanctuary for some of our smallest, but very precious animals, who will now take to the skies, flying fit and free for generations to come.

If you encounter a sick or injured bat or flying-fox, please do not attempt to handle or contain them as these species can carry Australian bat lyssavirus. Always contact your local wildlife rescue for advice and assistance. For more information on the work of Tasmania Wildlife Rehabilitation Council, please visit www.taswildlife.org







The Microbat Flight Training Centre built by the Tasmanian Wildlife Rehabilitation Council is the first of its kind in the state and will help these little bat-tlers get flying fit. It will provide enough space for rigorous flight training before release. The aviary will contain all the comforts of home for Tasmania's microbats in care. Images: Jordan Cameron.