Squirrel Gliders: The Emblem of Informed Sustainability and Better Land Management

Local Land Heroes

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Creative Catchment Kids

Creative Catchment Kids is an initiative of the Murray Darling Association and Wirraminna Environmental Education Centre. It aims to improve engagement between the Local Land Services and school students by providing opportunities for positive and authentic ventures that encourage students to develop creative solutions to agriculture and natural resource management issues.

Wirraminna Environmental Education Centre

The Wirraminna Environmental Education Centre is located in Burrumbuttock, north of Albury in southern NSW. Since 1995, the centre, which is adjacent to Burrumbuttock Public School, has provided opportunities for discovery and learning about the natural environment, the ecology of the local woodlands and the beauty of native plants. **www.wirraminna.org**

Murray Darling Association

The Murray Darling Association has membership of over 100 Local Government councils in the Murray-Darling Basin, as well as community groups, businesses and individuals with an interest in ensuring that the Basin continues as a valuable asset for all Australians. Since 1950, the Association has initiated various school and community education programs on managing the Basin's land and water resources. **www.mda.asn.au**

Enviro Stories

Enviro-Stories is an innovative literacy education program that inspires learning about natural resource and catchment management issues. Developed by PeeKdesigns, this program provides students with an opportunity to publish their own stories that have been written for other kids to support learning about their local area. **www.envirostories.com.au**

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Local Land Heroes

In 2014, students involved in the ***Creative Catchment Kids*** program researched and wrote stories about 'Local Land Heroes' - people, businesses or industries who contribute to productive agriculture and healthy environments along the Murray and Murrumbidgee rivers. The program was generously funded by Murray Local Land Services and Riverina Local Land Services. Production of this booklet was supported by the Slopes to Summit (S2S) partnership of the Great Eastern Ranges Initiative through funding from the NSW Government's Environmental Trust.

Local Land Heroes acknowledges the United Nations 2014 International Year of Family Farming. www.fao.org/family-farming-2014/en/

Local Land Heroes is part of Enviro-Stories, a PeeKdesigns education program.

Design by PeeKdesigns, www.peekdesigns.com.au

Characteristics and Overview

Size range

Squirrel gliders, from head to the base of the tail, range from 180 to 230mm long. Their tail is about 270mm, making their total length around 500mm long.

They weigh approximately 230 grams.

Identification

Squirrel gliders have long bushy tails, which are as wide as their body at the base.

The fur is usually a brown-grey colour with a dark stripe from the forehead and down the back. The bushy tail has a distinctive dark tip.

The underside of the body varies from pale grey to creamy yellow.

Squirrel gliders have a flying membrane that extends from their fifth front toe, to the back of their feet on both sides. When they glide, their tail allows them to steer in the direction they want to go.

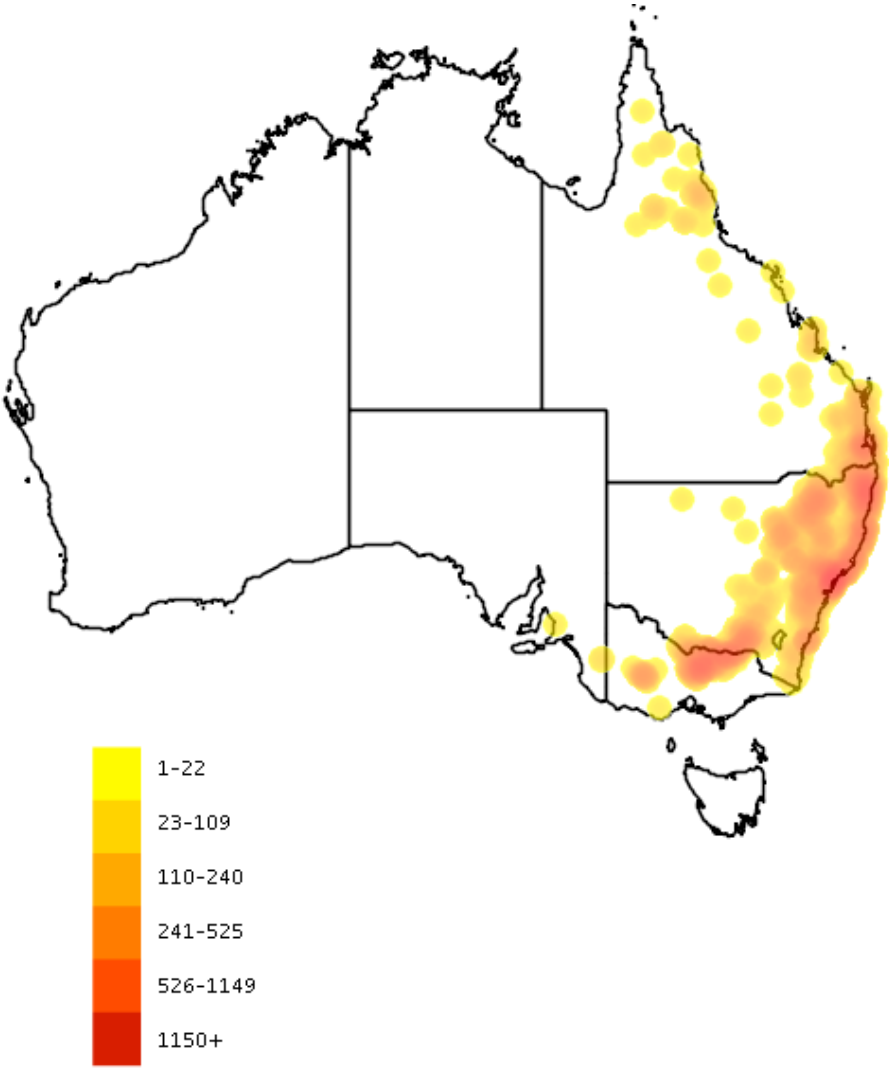
One of the distinguishing factors on the males is the presence of a scent gland on the top of their head. This is located in the middle of the dark strip that runs from the nose to the back of the lower middle back.

Squirrel Glider Distribution

Kingdom:	Animalia
Phylum:	Chordata
Class:	Mammalia
Infraclass:	Marsupialia
Order:	Diprotodontia
Family:	Petauridae
Genus:	*Petaurus*
Species:	*norfolcensis*
Scientific name:	*Petaurus norfolcensis*
Common name:	Squirrel glider

The Squirrel glider is of the same genus as similar Australian marsupials, including the smaller Sugar glider.

The Squirrel glider is endemic to Australia. It is found along the Great Dividing Range and surrounding areas. In south-eastern Australia, it lives in the dry sclerophyll forest and woodlands, while preferring the wetter eucalypt forests in Queensland.



Source: Atlas of Living Australia

Diet

A Squirrel glider's diet consists of nectar, pollen, plant sap, invertebrates, fruit and seeds. They eat these varieties of food because they are 'omnivores', which means they eat both meat and plants.

Their diet varies depending on the seasons and what is available for them to eat.

Winter: nectar, pollen, sap

Summer: invertebrates, fruit, seeds

Spring: nectar, pollen, plant sap, seeds

Autumn: sap from eucalypts and wattle (below)

Squirrel gliders pierce the trunk of the tree with their sharp claws and teeth so the sap is able to flow out. They will then lick the sap that oozes out of the tree.

Squirrel gliders are nocturnal. This means they sleep during the day and come out to find food at night.

Reproduction

The Squirrel glider breeding season commences around June and continues until January. Females can breed from 12 months old and they have more than one reproductive cycle per year, meaning that they are ‘polyoestrous’. Males can mate with one or more females per breading season.

Up to two young are produced every season with the gestation period approximately 30 days. The offspring will crawl to the mothers pouch and anchor themselves to a teat were it will stay for about three months. The young will leave and become independent at 12-18 months of age.

The life expectancy of a Squirrel glider is 4-6 years.

Predators and Threats

The Squirrel glider is listed as ‘common’ in Queensland, ‘vulnerable’ in NSW, ‘threatened’ in Victoria and ‘endangered’ in South Australia.

There are many threats to the Squirrel glider, causing their population to decrease. The main threat is the loss and degradation of their habitat due to agriculture, mining and human settlements. Some other threats to this species include:

- roads and cars
- fires
- a lack of food supply
- weed invasion
- barbed-wire fencing
- introduction of feral species - foxes and cats
- natural predators such as owls, snakes and goannas.

Conservation Strategies

There are many strategies that are being undertaken to ensure continued survival of Squirrel gliders.

- Trapping and tagging Squirrel gliders in the local area allows scientists to understand population numbers, movement of individuals and assess their health. This information helps in planning projects to protect the species.
- Using mapping to identify large treed areas where Squirrel gliders are living, or might be able to survive.
- Installing nest boxes and feeding stations in Squirrel glider habitat areas will help to increase the number of gliders in that area.
- Retain hollow-bearing trees to ensure they have a place to live and breed.
- Reduce barbed-wire fencing. Squirrel gliders can get easily entangled in the wire when gliding and landing on the fence.
- Reducing feral predator numbers. Encourage local communities to desex their cats and keep them inside at night. Reduce fox numbers by using a baiting program over a large area.

These strategies are important to ensure the continued survival and conservation of the Squirrel gliders.

LAMP
Squirrel Glider Project

The purpose of the Murray Local Land Services Local Area Management Plan (LAMP) is to secure viable populations of Squirrel gliders in the Murray catchment through community action.

LAMP process

The LAMP process uses the local community to help steer the planning and implementation of threatened species conservation.

The local community is involved throughout the process and they help determine the extent of on-ground works that can be implemented to support local populations of threatened species. Ultimately, the process devolves responsibility for implementing and managing the LAMP to the community.

Top: Ella Corbett, Kira Dawson and Britney Olsson

Bottom: Zoe Trebilcock, Alan Sandstorm and Melissa Smith

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peek designs

Murray Darling Association

Wirraminna Environmental Education Centre, Burrumbuttock

NSW Government Local Land Services Murray

NSW Government Local Land Services Riverina

Australian Government