

WILD SKILLS - GLIDER

Science & Technology
Wild Skill: Design & Make



SUGAR GLIDERS

In Australia, we have seven different species of gliders, a small nocturnal animal. In the [Taronga TV clip](#), you met Maluka the Squirrel Glider and Marley the Sugar Glider. Gliders are an arboreal species of marsupial, whose most distinguishing feature is the soft membrane between its wrists and ankles. This allows them to glide from tree to tree, like build in parachute!

Check out [Marley's glide](#) in slow motion.



FACT FILE

SCIENTIFIC NAME: *Petaurus breviceps*

TYPE: Mammals

DIET: Omnivores

GROUP NAME: Colony

AVERAGE LIFE SPAN: 3 - 9yrs

LENGTH: 16cm - 21cm

WIDTH: 4 - 6cm

WEIGHT: 115g - 160g

Habitat

The Sugar Glider is a tree dwelling marsupial who lives in forests and woodlands across various states in northern and eastern Australia. They are active at night, sleeping by day in their nests made of leaves inside tree hollows.

Diet

Their diet consists of nectar, pollen, sap and small invertebrates. Sugar Gliders have even been known to eat some small birds and their eggs.

Major Threats

Deforestation and habitat fragmentation, bushfires and feral animals who predate upon gliders.

Fun Facts

- Can glide 50m and use their bushy tails as a rudder to help steer.
- Live in groups of up to seven adults and their young. They may form a 'clan' and share a nest.
- Commonly gives birth to twins.
- Has five digits on each foot, including a handy opposable toe on its hind feet that allows it a firm grip on branches or a tree trunk.

GLIDER CROSSING



WHY DID THE GLIDER CROSS THE ROAD?

To find food, water, breeding sites or mates! Roads often separate natural landscapes, which a variety of species need to cross to get to the other side.

YOUR TASK

Australian animals need your help in designing a **wildlife crossing** to allow these creatures to cross roads safely. Wildlife crossings can include overpasses, underpasses, green bridges, rope ladders, small mammal tunnels and wildlife viaducts. The design of your wildlife crossing needs to suit a Sugar Glider. Your task is to design a crossing structure that gliders can use to cross a road safely and then build a prototype of it. Your structure needs to stretch over or under 80m of road. Use the scale 1cm = 1m to help you measure your crossing. Your structure must be able to support some weight of a small household or classroom item, for example a lego block, a pencil, a paperclip etc. Your structure could provide safety from predators.

PLANNING YOUR WILDLIFE CROSSING

List some of the considerations you will need to take into account when designing your crossing. Hint: think about the physical and behavioural features of a glider.

GLIDER CROSSING



PLANNING YOUR WILDLIFE CROSSING



Sketch and label your design below before you begin building your prototype. Check that it meets the requirements of the success criteria.

A large, empty rectangular box with a green border, intended for students to sketch and label their glider crossing design.

SUCCESS CRITERIA

Your prototype must:

- ✓ Stretch over or under the full 80m of road (scale 1cm = 1m)
- ✓ Be able to support a small amount of weight
- ✓ Provide safety from predators

To learn about some other species of gliders on our Taronga TV channel, check out this clips:

- [Monty the Yellow Bellied Glider](#)
- [Banjo the Yellow Bellied Glider](#)
- [Feathertail Gliders](#)

