





# RAINBOW STAG BEETLE

Invertebrate keeping guideline

# RAINBOW STAG BEETLE Phalacrognathus muelleri



#### **PROFILE**

Rainbow Stag Beetles are one of the world's most spectacular beetles. With their metallic sheen, stunning colours and the males' enormous mandibles they are certainly a sight to behold. The large mandibles are used by rival males to fight for the right to mate.

This species is found in the rainforests of north Queensland and although not regarded as rare, is certainly not commonly encountered. Adults are most usually encountered when they fly to lights at night.

While the adults are relatively long lived (up to 18 months), much of the life of this species is as a larva deep within the timber of a fallen tree. The larvae (grubs) will go through three instars before pupating to later emerge as an adult beetle. During the larval stage this species will feed upon on fungus-effected rotting wood, while as an adult this changes to a sugar-based diet largely comprising of fruits.

They are highly sought after by collectors, particularly large males. Despite limited captive breeding here in Australia, the species is now bred in huge numbers in Japan and elsewhere in Asia for the beetle collecting community.

#### FOOD

Fruits; banana and apple for adults. Offer small pieces and replace each day to avoid the fruit fermenting. Stag beetle diet (3 parts banana, 1 part Maple syrup, 1 part natural yogurt). Offer a teaspoon of the Stag beetle diet in a small dish, discard and replace on a daily basis.

#### WATER

Water does not need to be supplied in free form, however care must be taken to ensure enclosure conditions are maintained (below) to avoid dehydration.

#### **ENCLOSURE**

Plastic tubs make ideal enclosures, with dimensions at least 10cm high x 15cm long x 10cm wide. The tub will need a secure lid and some ventilation, however the moisture level and humidity within the enclosure needs to be maintained at levels above 70%.

#### **SUBSTRATE**

Coco-peat is an ideal substrate for maintaining adult beetles. This is available from Minibeast Wildlife's Bug Shop. The substrate should be kept very moist (but not sodden) – there should be no free water pooling below the substrate. The substrate depth should be at least 3cm to allow the beetle to burrow. Some pulpy wood may be added to this, and some small logs are good for the beetle to cling to; these will help to prevent the beetle flipping onto its back when wandering around on the surface.

#### **CLEANING AND MAINTENANCE**

Remove any uneaten food daily to prevent any mould or fungi growth in the enclosure. If mould or fungi does start to grow in the substrate, remove as necessary. A complete substrate change may be needed every 3-6 months.

#### **TEMPERATURE**

The safe temperature range for these beetles is 18 -24°C. They will tolerate both higher and lower temperatures for short periods of time. Higher temperatures will result in much more activity, but also may result in shorter lifespan.

## HANDLING

Can be handled, but care must be taken to do so gently. Never forcibly pull them off any surface (including your hand), as this may result in damage to the beetle's feet or legs. Rainbow Stag Beetles have very sharp curved tarsi (claws) on their feet and will lock into objects very well. If this occurs, allow the beetle to relax, then coax it forward by gently nudging the beetle from behind. You can gently lift the claws using your fingernails to encourage it to move on. Adult Rainbow Stag Beetles can fly. Never handle beetles in a situation where flight could result in damage (eg near operational ceiling fans) or loss (outside).

### **COMMON ISSUES**

Adult beetles are best kept separately to prevent any fighting between individuals which can result in damage to your beetle or even death.



12 - 18 months life span



These animals are captive bred, and should not be released into the wild



60-80%