

NEWSLETTER  
of the  
FRIENDS OF BATS

Issue 1  
June 1986



Are you excited by bats?  
Do you want to know more about them?

The Ku-ring-gai Bat Colony Committee invites you to  
join FRIENDS OF BATS.

This newsletter will keep you in touch with people who  
care for bats, keep up to date with current knowledge  
and find out how to contribute to the conservation of  
bats, especially flying foxes.

Send your donation of \$6 to the Treasurer,  
Ku-ring-gai Bat Colony Committee, 11 Warandoo Street,  
Gordon N.S.W. 2072 with your name and address.

Bats are abundant in the world. There are over 1,000 species of bats living in the world today. In fact bats comprise a quarter of all mammal species. This large group of furred animals which suckle their young has often been misunderstood. Is it because they are nocturnal?

Bats are found everywhere in the world except in the extreme polar regions so they figure in the fables and fancies of many lands. In some cultures they are believed to bring good luck. Sometimes they have been feared as bloodsucking vampires or the carriers of disease. Black shapes noiselessly flying across the night sky have been woven into frightening folk tales. Bats do not deserve this image. Why should people cringe when 'bat' is mentioned?

The truth is that bats are beneficial. They feed on insects which are pests of human food crops; they pollinate the flowers of many kinds of plants from ecosystems as diverse as rainforests and deserts; they disperse the seeds of the fruits they eat enabling forests to regenerate.

Through ignorance humans are severely reducing bat populations. In Europe many bat populations have declined by 90% in the last 20 years and are endangered. The world needs its bats.

This newsletter will present the truth about bats and explain the important roles they play in the web of life. Join us in appreciating these fascinating wild animals and by using your knowledge to help in their conservation.

The Ku-ring-gai Bat Colony Committee was formed to inform the public on the ecological importance of bats and to help develop a management plan for the last flying fox colony in Sydney - the most important breeding site of the Grey-headed Flying Fox known in southern N.S.W.

## THE KU-RING-GAI BAT COLONY, Sydney

Few cities in the world can boast of their own bat colony. Sydney's bat colony is the only maternity site of the Grey-headed Flying Fox (*Pteropus poliocephalus*) known in southern N.S.W.

In the northern suburb of Gordon there is a forested valley where these big bats spend the day resting, cleaning their fur and caring for their young. In October and November mature females give birth to one baby which they feed for up to six months.

At dusk they begin to fly out of the valley for a night of foraging in the tree tops. In October many bats feed on the flowers of Turpentine trees. Throughout the summer they feed all over the metropolitan area on a wide range of flowers and fruit.

In the past it was believed that when the bats left the valley in April that they flew north to avoid the cold southern winter. Last July over 100,000 were seen leaving a roost site at Yatta Yattah south of Nowra. The flying foxes were feeding on the nectar and pollen of the Spotted Gum flowers.

Flying Foxes are now recognised as important pollinators of our hardwood forests and pollinators and seed dispersers of rainforest plants. Now that they are protected by law in N.S.W. their roost sites also need protection.

Unfortunately the Ku-ring-gai Colony is threatened by the death of its roost trees caused by rampant weed infestation. The Ku-ring-gai Bat Colony Committee believes that the situation is urgent and is currently seeking funds to commence a bush regeneration program so that a new generation of trees can replace those whose life expectancy is estimated at 15 to 20 years.

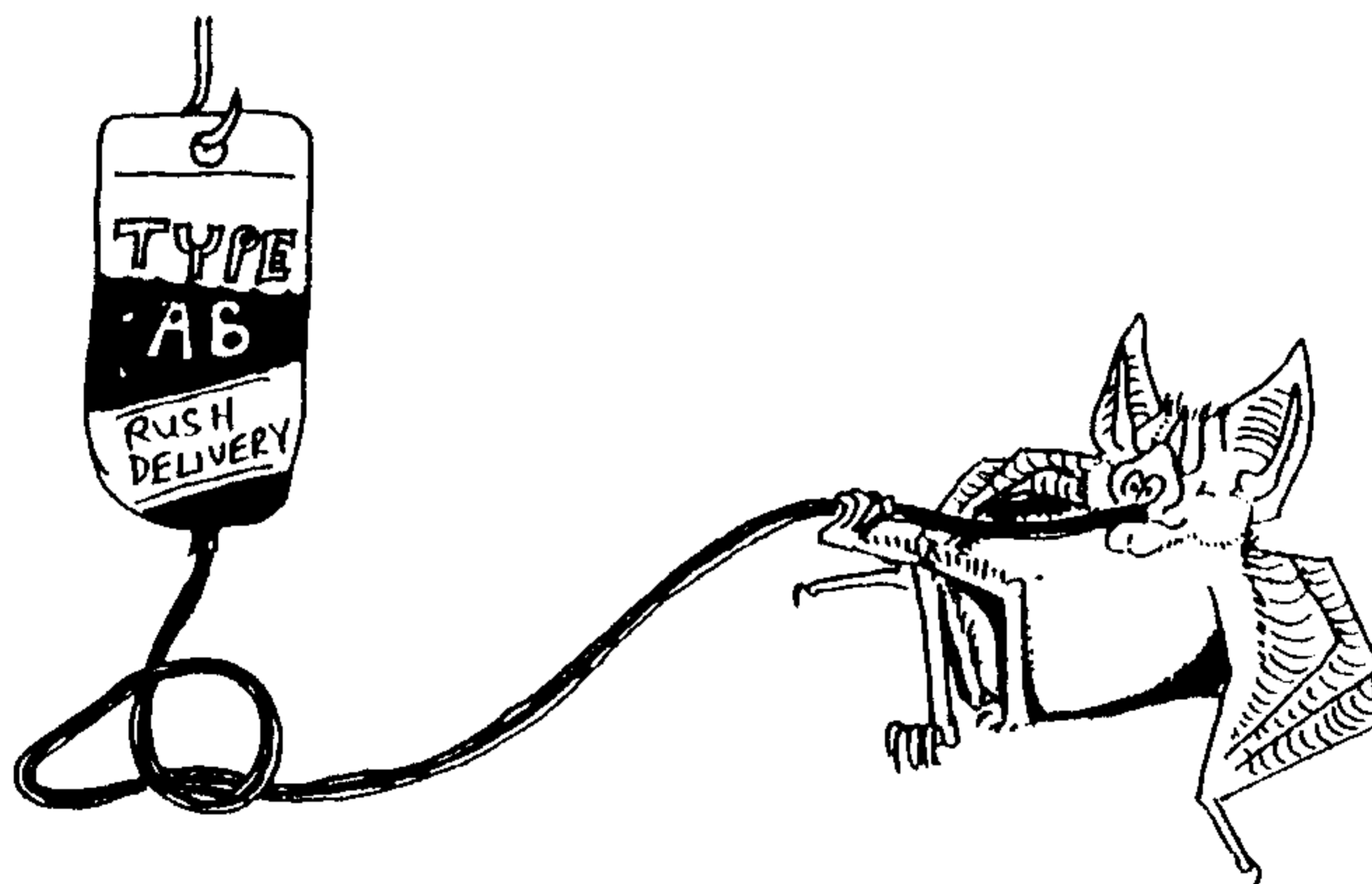
Your support is welcome.

## DRACULA AND VAMPIRES

### AND BLOOD AND IRON

Vampires, the ghost or spirit of a dead person which sallies forth at night to suck the blood of the living and causes them to pine and die, have been part of Western superstition for millenia. Ancient Greek authors recorded the beliefs of their day; Christianity turned vampires into excommunicated persons kept alive by the devil and believed to feed themselves by sucking blood.

Curiously, there is little clear association of bats with vampires and witches in Europe until the publication of Bram Stoker's Dracula in 1897. Bats were revered by the gypsies of Eastern Europe as the luckiest of animals. Gypsy children carried dried fragments of a bat in a black bag; in Bohemia the right eye of a bat, carried in the waistcoat pocket, supposedly made the wearer invisible.



Stoker's main character was based on a real person, Vlad the Impaler (c1431 - 1467), a Roumanian city lord who, although he rid himself of his enemies in the bloody way his sobriquet tells, was not regarded as a vampire. Stoker may have been influenced by tales of vampire bats brought from the Americas. Blood-sucking bats, first recorded when Columbus landed in Trinidad

in 1498, were reliably recorded by two great naturalists, Wallace and Bates, when they travelled the Amazon in 1848.

Wallace and Bates' blood feeding bats are a small species not more than seven centimetres long and possessing an upper incisor and canine teeth capable of slicing the skin like a razor. Their molar teeth are minimal and their alimentary canal adapted to an exclusive diet of blood. The damage these true vampires Desmodus rufus and Diphylla ecaudata do has been exaggerated because travellers sometimes ascribed blood-sucking habits to a larger fruit-eating species.

Captive Desmodus drink about 15 ml. a night but it is thought that in the wild they may drink up to 30 ml, and one and a half times their body weight. This could mean about 7 litres a year. So a colony of 100 Desmodus would lap up about the volume of 25 cows a year, or 14,000 chickens.

Back to Dracula. Nineteenth century travellers' tales seem to have got mixed with old superstitions, and bats to have become associated with vampires, perhaps because both are nocturnal. It's also possible that there WAS an East European ruling family with a blood disorder: anaemia, a deficiency of red-blood cells that makes its sufferer pale and languid. An iron-rich diet - such as blood sausage - could have answered an anaemic's craving.

Three hundred years ago it was discovered that iron was present in the blood although its main role, as the oxygen carrier in red blood cells, wasn't understood. Yet a physician in Oliver Cromwell's army recommended that anaemic young women take a daily dose of half a gram of iron filings, steeped in a glass of Rhine wine. It gave their worn out, languid blood a filip, he said, and made their cheeks ruddy again. I'd rather the blood sausage.

CORALIE CREEVE

Friends of Eds Newsletter  
June 1986

If you compare a bat's wing with your own arm and hand you will find both limbs have similar bones. The bat's finger bones are very long and are used to shape the wing aerodynamically in flight. Scientists group bats in the order 'Chiroptera' which is derived from the Greek word "kheir" meaning hand.

### Insectivorous Bats (microchiroptera)

Insect eating bats mostly weigh only about 20 grams although some species weigh as much as 150 grams. After sunset they leave their caves or tree holes to feed on insects especially moths. They use echolocation to find and catch their prey.

Some people think these little bats ugly because of their peculiar noses and large ears but these features are essential to a bat's "radar system". The nose flaps direct the high frequency sounds and the large ears receive the returning echo. Thus a bat can catch an insect in flight or navigate through a pitch dark cave.



### Flying Foxes (Megachiroptera)

Flying foxes which are also called fruit bats live in camps numbering tens of thousands in forests. At dusk they fly out in search of food. Trees which provide abundant nectar and pollen in their flowers are found by these bats using their excellent eye sight and acute sense of smell (not echo location). Ripe fruit is also important in their diet and they disperse seeds widely. Many rainforest plants are dependent on seed dispersal by bats to regenerate. Flying foxes pollinate many Australian trees such as Eucalypts, Paperbarks, Black Bean, Turpentines and Lily Pilly.

## HELEN'S HAPPENINGS

Helen George has cared for injured and orphan bats for ten years. Possums, kangaroos, wombats and echidnas are regular boarders in her house. In this column she will tell of some of her experiences with bats.



Many of the wild animals which are brought to me are very young and were found on their dead mother. They need to be kept warm and dry immediately. Wrap them in a soft cloth such as an old tea towel and place them in a woollen sock. For baby bats just fold their wings gently by their sides and allow the hind claws to grip onto the cloth.

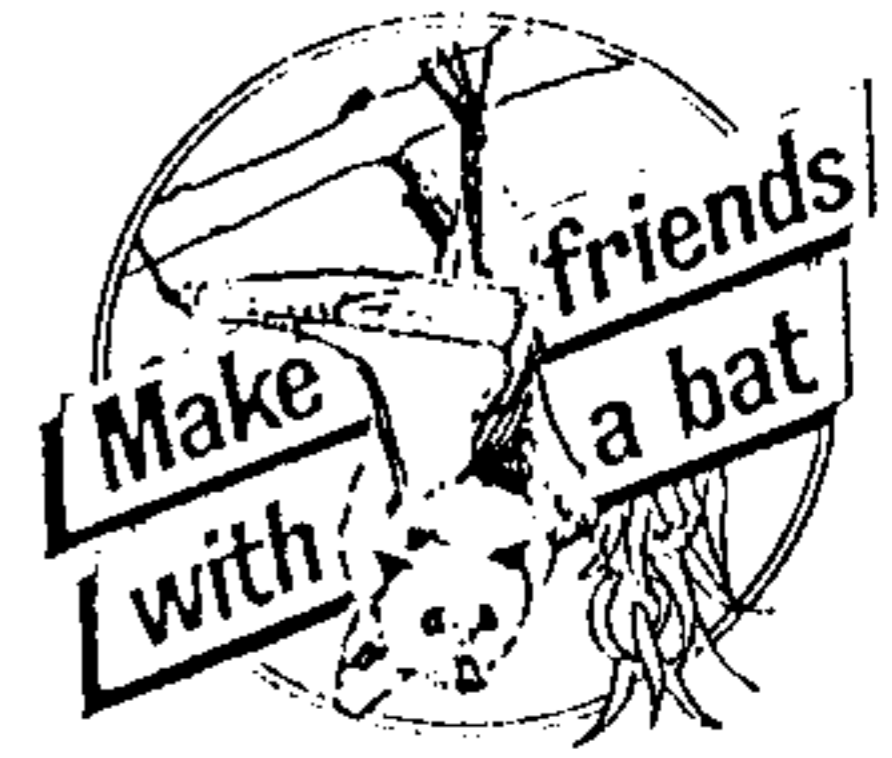
Baby flying foxes are very difficult to rear in the first month. Invariably they develop pneumonia and by the time symptoms show it is too late. Seek veterinary help for an antibiotic immediately.

If you are prepared for the constant demands of being a bat-mother you may obtain printed up-to-date information on feeding from the Committee. (see page 7)

I have helped many bats recover and return to the wild. A few have come back to feed on my verandah weeks after being set free. Obviously they have found enough to eat. For various reasons some cannot be set free so they live in the large vine covered cages in my garden or in wild life sanctuaries.

## ACTIVITIES FOR BAT LOVERS

Meet a live flying fox, feel its soft wings and allow it to sniff you ..... you can make friends with a bat!



Enjoy spectacular slides of bats from around the world taken by Dr. Merlin Tuttle, a bat scientist of world renown. Buy a sticker like the design above. (50c)

Bat talks including the above, may be arranged for your school or club with

The Secretary,  
Ku-ring-gai Bat Colony Committee,  
45 Highfield Road, Lindfield 2070.  
(02)467 1334 or (02) 457 9827

A donation of \$1 per person is requested to care for the bats and contribute to bat conservation.

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The Royal Zoological Society of N.S.W. has begun to gather information on the movements and feeding behaviour of flying foxes in N.S.W. To obtain your brochure and sighting report contact

BAT WATCH  
Royal Zoological Society  
P.O. Box 20  
Mosman N.S.W. 2088

Persons keen to count bats at the Ku-ring-gai Bat Colony on a regular basis please contact Kerrin Parry Jones through Bat Watch.

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Next Issue will contain an article on the bat colony at Mt. Etna near Rockhampton, Queensland - once a great controller of insect pests.

Illustrations by Martyn Robinson.