



*This publication is dedicated to Murrumbur clan member Mick Alderson. Mick inspired us to produce this guide by suggesting a pamphlet about butterflies. Although he will never see this finished product, we trust that it will be of interest to his family, friends, and to those who visit Kakadu. We gratefully acknowledge Dr Jenny Davis who initiated the first talks with Mick.*



## References

Braby MF 2000. *Butterflies of Australia: Their identification, biology and distribution.* Vol 1 & 2, CSIRO Publishing, Melbourne.

Valentine P 1991. *Australian tropical butterflies.* Frith & Frith Books, Malanda Qld.

*Caroline Camilleri & Abbie Spiers*

© *eriss*, May 2002



***eriss** carries out scientific research for the protection of people and the environment in places that are highly valued by the Australian community.*

## Contact Officers

Caroline Camilleri Ph +61 (0)8 8979 9711  
e-mail: caroc@eriss.erin.gov.au

Abbie Spiers Ph +61 (0)8 89829100  
e-mail: abbies@eriss.erin.gov.au

Environmental Research Institute  
of the Supervising Scientist  
Locked Bag 2 Jabiru NT 0886



*eriss*  
*notes*

## BUTTERFLIES IN WETLANDS OF KAKADU NATIONAL PARK, NORTHERN AUSTRALIA



*Photo by Caroline Camilleri*

Butterflies can be found in various habitats throughout Kakadu National Park, from shady, tranquil vine thickets to the diverse savanna woodland and vast, spectacular wetlands. At certain times of the year some species congregate in great numbers in cool, monsoon rainforest pockets. Others frequent the shady creeks and springs that create deep gorges in the escarpment and flow out into the savanna woodland. Some butterflies prefer to inhabit paperbark forests, mangrove swamps and estuaries along the coast.

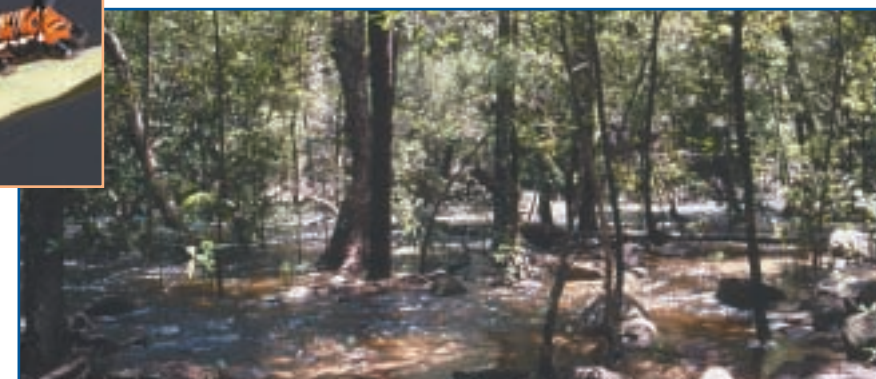
There are about 100 species of butterflies inhabiting Kakadu. Here we describe 20 of the species most likely to be seen in wetlands and riverine habitats throughout the Park. We have recorded their scientific and common names and the most likely habitat in which each species can be found. We have done this in response to a request from local Aboriginal representatives, who are keen to know more about the ecology of the plants and animals in Kakadu. It is hoped that the scientific information on the ecology of such species will complement the existing knowledge of local people and lead to a greater appreciation of the biodiversity of the Park, and in particular the wetland and riverine habitats.

Butterflies come in many sizes and colours, some bold and bright, others perfectly camouflaged. They are commonly referred to as 'insects of the sun' with their eyecatching colours and delicate charisma. As our awareness of our environment increases, we better understand the role they and other

invertebrates play in helping us to identify and preserve critical habitats under threat. Butterflies can be used as indicators for monitoring climate change or pollution, or identified as rare or threatened species themselves needing conservation. We anticipate that further analysis of invertebrate biodiversity in Kakadu's wetland habitats will illustrate the importance of these animals and their potential as indicators of environmental change. However, first we need further information on the ecology and habitat preferences of such species. This analysis of butterflies is an example of this effort – an effort that extends across the landscape and habitats of the Kakadu region. The Environmental Research Institute of the Supervising Scientist is contributing to this effort in collaboration with local people and land managers.

The preference of butterflies for particular habitats is often closely linked to the adult or larval food source. Butterflies undergo a complete metamorphosis in their lifecycle, from egg through to larva (caterpillar), pupa and adult. Eggs are usually laid on the undersurface of leaves of the larval food plant, such as a wetland grass, vine or herb. Once hatched, the caterpillar's main aim is to eat and grow. Some caterpillars are spectacularly marked with large fleshy spines. The next stage of development is the pupa, which does not feed, and where the transformation from caterpillar to butterfly occurs. When the adult butterfly emerges from its silken cocoon, it begins the cycle once more by reproducing and continuing dispersal of the species.

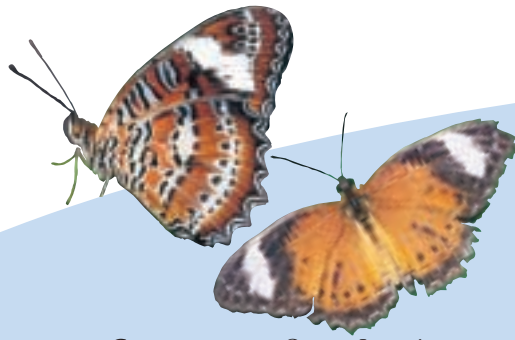
*The caterpillar of an Oleander butterfly. These 'milkweed butterflies' breed in monsoon forest along river courses and in moist gullies and gorges. Photo by Caroline Camilleri. Below: Photo by Michael Saynor.*



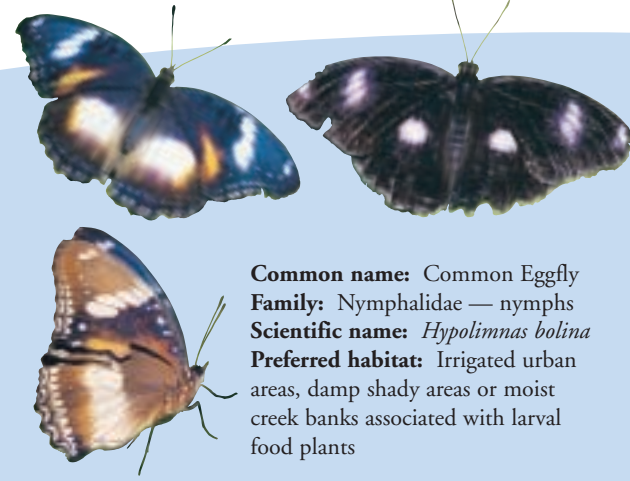




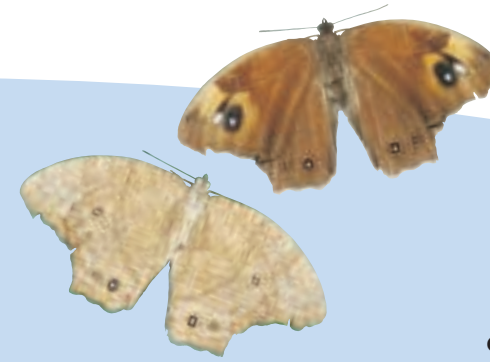
**Common name:** Blue Tiger  
**Family:** Nymphalidae — milkweed butterflies  
**Scientific name:** *Tirumala hamata*  
**Preferred habitat:** Wetlands, along creeks and coast during the dry season



**Common name:** Orange Lacewing  
**Family:** Nymphalidae — passion-vine butterflies  
**Scientific name:** *Cethosia penthesilea*  
**Preferred habitat:** Vine thickets, often along streams associated with larval food plants



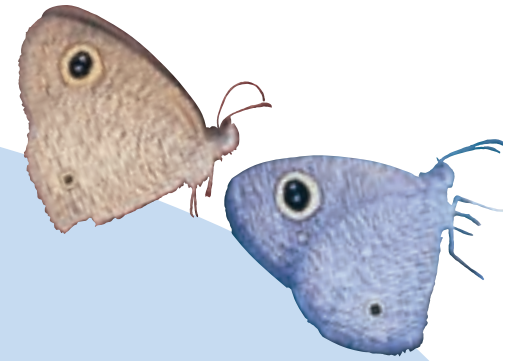
**Common name:** Common Eggfly  
**Family:** Nymphalidae — nymphs  
**Scientific name:** *Hypolimnna bolina*  
**Preferred habitat:** Irrigated urban areas, damp shady areas or moist creek banks associated with larval food plants



**Common name:** Evening Brown  
**Family:** Nymphalidae — browns  
**Scientific name:** *Melanitis leda*  
**Preferred habitat:** Irrigated urban gardens associated with larval food plants such as grasses



**Common name:** Blue-banded Eggfly  
**Family:** Nymphalidae — nymphs  
**Scientific name:** *Hypolimnna alimena*  
**Preferred habitat:** Rainforest and lowland rainforest where larval food plant grows as a herb



**Common name:** Dingy Ring/Dusky Knight  
**Family:** Nymphalidae — browns  
**Scientific name:** *Ypthima arctous*  
**Preferred habitat:** Coastal woodlands

## Browns, Nymphs, Danaines



**Common name:** Oleander Butterfly  
**Family:** Nymphalidae — milkweed butterflies  
**Scientific name:** *Euploea core corinna*  
**Preferred habitat:** Irrigated urban areas, open forest and woodlands in coastal habitats associated with larval food plants. Breeds in areas of monsoon forest along river courses and in moist gullies and gorges.



**Common name:** Cedarbush Brown  
**Family:** Nymphalidae — browns  
**Scientific name:** *Mycalesis sirius*  
**Preferred habitat:** Wetlands including lowland coastal paperbark forests associated with food plants



**Common name:** Black and White Tiger, Swamp Tiger  
**Family:** Nymphalidae — milkweed butterflies  
**Scientific name:** *Danaus affinis affinis*  
**Preferred habitat:** Coastal wetlands including estuaries and along brackish creeks and mangrove swamps associated with larval food plants



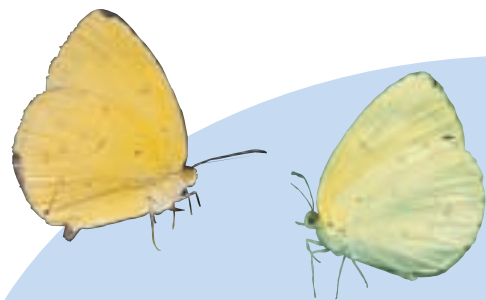
**Common name:** Lesser Wanderer  
**Family:** Nymphalidae — milkweed  
**Scientific name:** *Danaus chrysippus*  
**Preferred habitat:** Open country, including coastal and sub-coastal habitats



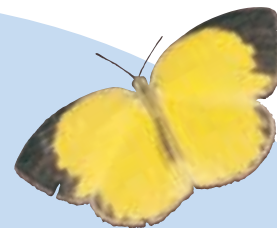
**Common name:** Meadow Argus  
**Family:** Nymphalidae — nymphs  
**Scientific name:** *Junonia villida calybe*  
**Preferred habitat:** Savanna woodland



**Common name:** Glasswing  
**Family:** Nymphalidae — glasswings  
**Scientific name:** *Acraea andromacha andromacha*  
**Preferred habitat:** Savanna woodland and moist areas associated with larval food plant, native passion vine



**Common name:** Common Grass Yellow  
**Family:** Pieridae — yellows  
**Scientific name:** *Eurema hecabe*  
**Preferred habitat:** Savanna woodland and irrigated urban areas associated with larval food plants such as herbs

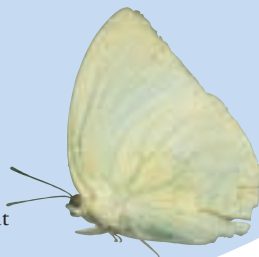


**Common name:** Line Grass Yellow  
**Family:** Pieridae — yellows  
**Scientific name:** *Eurema laeta*  
**Preferred habitat:** Tropical grasslands and woodlands where food plant grows as a herb

## Whites and Yellows



**Common name:** Lemon Migrant  
**Family:** Pieridae — whites  
**Scientific name:** *Catopsilia pomona*  
**Preferred habitat:** Irrigated urban areas associated with larval food plant



## Skippers, Awls and Darts

**Common name:** Skipper  
**Family:** Hesperidae — skippers, awls, darts  
**Preferred habitat:** Irrigated urban areas



## Blues



**Common name:** Spotted Opal  
**Family:** Lycaenidae — blues  
**Scientific name:** *Nesolycaena uramelia*  
**Preferred habitat:** Woodland, outcrops and gorges associated with larval food plant



**Common name:** Pale Green Triangle  
**Family:** Papilionidae — swallowtails  
**Scientific name:** *Graphium eurypylus*  
**Preferred habitat:** Wetlands along edges of vine thickets and monsoon forest, associated with fruit-bearing food plants

## Swallowtails



**Common name:** Big Greasy  
**Family:** Papilionidae — swallowtails  
**Scientific name:** *Cressida cressida*  
**Preferred habitat:** Tropical coastal areas and savanna woodland associated with larval food plants that grow as vines