Threatened species of the Northern Territory

Dodd's azure

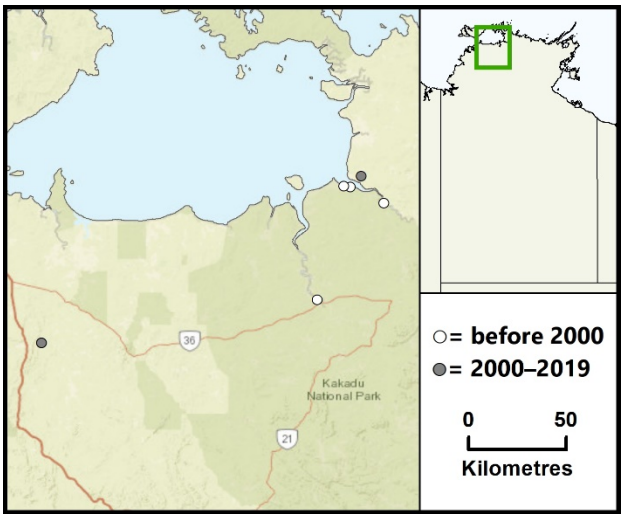
Ogyris iphis doddi

Conservation status

Australia: Not listed
Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Endangered
Territory Parks and Wildlife Conservation Act 1976

Credit: Photo: © M. F. Braby



Caption: Known localities of Dodd's Azure in the NT (nrmaps.nt.gov.au)

Description

Dodd's Azure is a medium-sized butterfly, with a wingspan of about 32 mm. The upperside of the wings is an iridescent pale blue, while the underside is pale brown, with two or three broad brown-black bars edged with iridescent blue on the forewing. It is a subspecies of the Orange-tipped Azure *Ogyris iphis*.

Distribution

Dodd's Azure is apparently restricted to the Top End of the NT. It is known only from two sites: Darwin[1–2] and Melville Island[3]. The subspecies was first discovered at Darwin in 1908–09 by F.P. and W. Dodd, but it has not been positively recorded since that time; although an adult resembling this species was observed at Bens Hill in March 1992[4]. Only a single specimen is known from Melville Island, which was collected from Pularumpi in June 1986.

Dodd's Azure may also occur in the Mitchell Plateau of the Kimberley, Western Australia, based on an unconfirmed sighting[5].

NT conservation reserves where reported: None.

Ecology and life-history

The ecology and life-history of Dodd's Azure are poorly known. Adults have been recorded in February, June, September and November[1,3,4]. The larvae feed on mistletoe and are attended by ants[2]. The preferred habitat appears to be eucalypt forests.

In contrast, the biology of the Orange-tipped Azure *Ogyris iphis iphis* in Queensland is well known. Larvae of this subspecies feed on several species of mistletoe in the genera *Amyema* and

Dendrophthoe (Loranthaceae), and are always attended by the ant *Froggattella kirbii*[3]. The larvae shelter during the day in hollows or cracks in the haustorium of the mistletoe where the attendant ants have established a nest, and pupate in similar situations. The adults fly rapidly among the tree tops, but are rarely observed. There are at least two generations annually in Queensland, where it occurs in dry eucalypt woodland and open forest, usually on sandy soils derived from sandstone or granite[3]. The subspecies is highly localised, but it can be seasonally abundant in places where the food plants and attendant ant occur together.

Threatening processes

There is no evidence that any external factors have caused a decline in the number of individuals or distribution of Dodd's Azure. However, some factors may threaten its persistence.

Fire regimes in Darwin, and more generally throughout the Top End, have shifted to an increased frequency and intensity of burning. There is anecdotal evidence that increased fire intensity leads to a decline in mistletoe abundance, since these plants readily succumb to fire. A decline in larval food plants is likely to result in declines of Dodd's Azure and related species that are dependent on mistletoes[3,5].

Much of the preferred habitat of Dodd's Azure is subjected to escalating levels of land clearing for horticulture, forestry plantation (on Tiwi Islands) or residential areas. Such habitat loss is a potentially significant threat to the subspecies.

Conservation objectives and management

There is no existing conservation management program for Dodd's Azure in the NT.

Research priorities for the subspecies are to: i) undertake surveys to determine if the subspecies is still extant and to locate any additional localities; ii) investigate its biology and ecology to determine habitat requirements and identify breeding sites; iii) establish a monitoring program; and iv) identify and quantify impacts of threatening processes.

Management priorities are to: i) encourage appropriate fire management; ii) control the spread of exotic grasses; and iii) maintain adequate areas of its preferred habitat within its limited distribution.

References

[1] Waterhouse, G.A., Lyell, G., 1914. The Butterflies of Australia. A monograph of the Australian Rhopalocera. Angus and Robertson, Sydney.

[2] Dodd, W.D., 1935. Meanderings of a naturalist. The North Queensland Register.

[3] Braby, M.F., 2000. Butterflies of Australia: their identification, biology and distribution. CSIRO Publishing, Melbourne.

[4] Meyer, C.E., Weir, R.P., Wilson, D.N., 2006. Butterfly (Lepidoptera) records from the Darwin region, Northern Territory. Aust. Entomol. 33, 9–22.

[5] Sands, D.P.A., New, T.R., 2002. The Action Plan for Australian Butterflies. Environment Australia, Canberra.