

Biting Midge Pest Calendar For Coastal NT 2022



Culicoides ornatus

Medical Entomology
Public Health Unit
NT Health
Northern Territory Government

Biting Midge Pest Periods in Coastal Northern Territory Areas

The mangrove biting midge, *Culicoides ornatus* can be an appreciable pest close to its breeding sites. In the NT, *C. ornatus* causes the greatest problems around extensive coastal and tidal river mangrove areas up to 2km inland from the mangrove margin.

The main breeding sites for mangrove biting midges are in the upper reaches of small tidal creeks, and are associated with mud and *Rhizophora* and *Avicennia* mangrove pneumatophores. The most productive areas are those with a high density of small, mangrove-lined channels. Less productive breeding sites include muddy foreshores with areas of the mangrove tree *Sonneratia alba*, which can cause minor pest problem starting 2 to 3 days earlier than the main pest periods indicated in this calendar.

Mangrove biting midge abundance is usually highest 3 days either side of the full moon and, to a lesser extent, 3 days either side of the new moon. Relatively low numbers occur during the wet season, with an increase from April to July. Highest numbers usually occur between August and December, coinciding with the increase in high tide levels each month during this period.

Culicoides ornatus are most active in the 2 hour period before and after sunrise and sunset. However, bites can also occur at other times and during the day in or adjacent to their breeding sites.

Biting midges do not transmit diseases to humans in Australia, but scratching of the bites may lead to secondary bacterial infection.

Personal protection, such as full-length trousers, long-sleeved shirts, socks and shoes, and the use of insect repellents containing DEET, picaridin or PMD (extract of lemon eucalypt) will generally be required within 2 km of biting midge breeding sites. Other protection measures are outlined at

<https://digitallibrary.health.nt.gov.au/prodjspui/handle/10137/741>

This calendar shows periods when high *C. ornatus* numbers are expected in NT coastal areas in 2022. Biting midge numbers vary greatly depending on the location, and may be present at or very near the mangrove margin at any time.

For more information please contact: Medical Entomology, PHU, NT Health, Darwin on (08) 89228901

Disclaimer:

This Pest Calendar has been developed to provide an indication of potential *C. ornatus* pest periods, and therefore should only be used as an indicator.

Biting Midge Pest Calendar for coastal NT 2022

JANUARY						
M	T	W	T	F	S	S
					1	2
3●	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18○	19	20	21	22	23
24	25	26	27	28	29	30
31						

MARCH						
M	T	W	T	F	S	S
	1	2	3●	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18○	19	20
21	22	23	24	25	26	27
28	29	30	31			

MAY						
M	T	W	T	F	S	S
						1●
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16○	17	18	19	20	21	22
23	24	25	26	27	28	29
30●	31					

JULY						
M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14○	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29●	30	31

SEPTEMBER						
M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10○	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26●	27	28	29	30		

NOVEMBER						
M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8○	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24●	25	26	27
28	29	30				

FEBRUARY						
M	T	W	T	F	S	S
	1●	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17○	18	19	20
21	22	23	24	25	26	27
28						


APRIL						
M	T	W	T	F	S	S
				1●	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17○
18	19	20	21	22	23	24
25	26	27	28	29	30	


JUNE						
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14○	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29●	30			

AUGUST						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12○	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27●	28
29	30	31				


OCTOBER						
M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10○	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25●	26	27	28	29	30
31						

DECEMBER						
M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8○	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23●	24	25
26	27	28	29	30	31	

 Very high peaks of *C. ornatus*

 Moderate peaks of *C. ornatus*

 High peaks of *C. ornatus*

 Low to moderate peaks of *C. ornatus*

○ Full moon ● New moon