GENERAL INFORMATION

Commonly known as ‘Sand Flies’, Biting Midges are small flies renowned for their nuisance biting associated with habitats such as coastal lagoons, estuaries, mangrove swamps and tidal flats. The Biting Midges activity is similar to that of mosquitoes, in that they most commonly bite around dusk and dawn, and are relatively inactive in windy conditions. Biting Midges will usually only disperse short distances from their breeding sites. Blood meals are only sought by females in preparation to lay eggs, however, both males and females will feed on vegetable fluids and nectar. Female midges may attack humans in large numbers, biting on any areas of exposed skin, and often on the face, scalp and hands. Some species will blood feed on a wide range of animal hosts.

LIFE CYCLE

Adult Females lay batches of eggs containing between 30-100 eggs, on selected grounds such as mud, decaying leaf litter, damp soil or other vegetative materials. Larvae then hatch from the eggs a few days later in water containing high organic content. The larvae moult through four (4) larval stages, before into pupa, where feeding ceases. Shortly after, the adult emerges, and females go in search of a blood meal to continue the cycle. The whole life cycle takes 3-10 weeks, depending on species and environmental conditions, particularly temperature.

ENVIRONMENTAL CONDITIONS AFFECTING BITING MIDGE ACTIVITY

- **Time of day**: Most active around dusk and dawn.
- **Temperature**: Activity increases with the temperature until between 27-32°C.
- **Wind**: Activity decreases as the wind increases.
- **Moisture**: Activity increases with the humidity, except when it is raining.
- **Season**: Commonly more active during warmer summer months, though continually active in Cairns.
- **Tide & Moon**: Adult flight activity increases shortly after high and spring tides.

For any further enquiries, please contact the Customer Service Centre on 4044 3044 and ask to speak to the Public Health Unit.
DO BITING MIDGES SPREAD ANY VIRUSES OR DISEASES?

Biting Midges are not known to transmit any diseases, however, people may have varying reactions to their bites. Midge bites usually result in acute discomfort, irritation and local reactions. Itching may commence immediately after the bite, but often not for some hours later, and most individuals are unaware of being bitten at the time. Some people however, may have a severe reaction to the bite which may result in them blistering and weeping. These reactions may last for several days to weeks. If you experience discomfort from the bites of Midges, seek medical attention to help relieve symptoms.

TREATMENT AND CONTROL

Various formulations of the natural insecticide, pyrethrum, are available from most plant nurseries and hardware stores. Pyrethrum has little residual capacity, so applications may be needed on a regular (weekly) basis while midges are causing a problem, particularly over the summer period. There are also some organic insecticides that can be used around the house and garden to reduce adult populations, however, due to their low residual capacity, regular treatments will be required.

WHAT CAN I DO TO PROTECT MYSELF AND FAMILY FROM BITING MIDGES?

Midges prefer humid overcast conditions with minimal air movement, and can penetrate regular insect screens. The following actions can be taken to reduce the likelihood of being bitten by midges.

- **Avoid watering** your garden around sunset. Midges are attracted to shady, humid areas.
- Biting midge can be attracted to **house lights**.
- **Increase air movement**. This discourages midges from landing and biting.
- Use **insect repellents** when necessary and follow label directions and precautions closely.
- Make sure window and door screens are “**bug tight**”.
- Spray **residual insecticide** on flyscreens.
- Where appropriate, try to wear **long sleeves** and **long pants, light coloured** and **loose fitting clothes**, especially around dusk and in areas of high midge populations.
- Replace your outdoor lights with **yellow “bug” lights**.
- **Reduce vegetation** around the house.
- **Medical treatment** should be sought if you or a family member are experiencing discomfort as a result of a bite from Midges.

For any further enquiries, please contact Cairns Regional Council’s Customer Service Centre on 4044 3044 and ask to speak to the Public Health Unit.