

» biting midges

This fact sheet provides public health information for Ballina Shire residents



Biting midges, commonly known as sandflies, are small insects that belong to the family of flies *Ceratopogonidae*.

Some species of biting midge are known to suck blood from humans and animals. Biting midges can cause a nuisance in coastal lagoon environments, estuaries, mangrove swamps, canals and tidal plains but they are not known to transmit diseases to humans.

» Biting midges facts

Biting midges are active where there is minimal air movement, at dawn and dusk and they shelter amongst vegetation.

Usually biting midges disperse only short distances from breeding sites. However, some species can travel up to three kilometres from breeding sites.

Biting midges can enter human environments and rest on fences, fly screens, vegetation and wait for a blood feed. Only female biting midges attack humans. However both males and females feed on nectar.

An egg batch can contain 30 to 100 eggs and are laid on mud, moist soil, decaying vegetation and in other organic environments. Larvae hatch in a few days and thrive in an organic habitat where they grow to pupate stage.

An adult biting midge can grow up to 1.5mm to 4mm long. Biting midge life cycle takes 3 to 10 weeks, depending on the species and environmental conditions.

» Health issues

Biting midges can cause acute discomfort and irritation due to their feeding technique but are not known to transmit any diseases to humans.

Each bite can leave inflammation on the skin which fills with damaged skin tissue and anticoagulants (transferred in the biting midge's saliva). These bites can trigger an allergic reaction in sensitive people.

General symptoms of the bite sites are swelling, redness, itching and severe irritation (severe irritation can lead to

bacterial infection). Acute allergic reactions may require medical attention. Some local residents will build up immunity to biting midge bites over a period of time.

These insects play an important part in the ecosystem being a food source to native fish species. They can be a public health nuisance when housing developments are located close to biting midge breeding environments.

» Useful tips

Be mindful when planning outdoor activities during sunrise and sunset. Cover exposed skin or apply an insect repellent containing DEET or picaridin (these products must be used according to directions on the packaging).

Keep vegetation around the house sparsely planted and to a minimum to improve strong wind flow.

Increase air flow inside the house using ceiling fans or other air circulation strategies.

Make sure all windows and doors are adequately screened. Carefully designed fly screens (ie smaller mesh) can assist residents in impacted areas.

Engage a professional pest controller to spray flyscreens, exterior walls, fences, gardens and plants with a product containing bifenthrin to achieve up to 6 weeks of control (be careful not to use where it can enter waterways or other sensitive environments as this product impacts on non-target species).

Use mosquito coils or insecticide vaporisers.

» Environmental concerns

Biting midge life cycles start in environmentally sensitive ecosystems, using larvicide and pesticides can be harmful to the ecosystem, including native fish species.

Biting midge larvae exist in substrates such as mud, moist soil, and other organic environments making it difficult to treat them.

There are no approved larvicides for the control of biting midges.

Ballina Shire Council does not undertake a biting midge control program due to these reasons.

» ***If you have any questions or concerns please contact:***

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