TREATMENT

• Hidden Valley Handcrafts developed a topical cream for midge bites in the late 1990s. It was originally called “Sandfly Salve”, but we have finally changed to the more accurate name **Midgie Magic**. This has proven an effective cream to take away the itch, soothe and disinfect the area, and promote the healing process, all using natural herbs and essential oils such as calendula, plantain, aloe vera, lavender, chamomile and kunzea (tick bush). It is important to apply the cream as soon as possible to bites, and reapply frequently for several days until swellings have disappeared. Occasionally, extremely severe reactions may require medical treatment with antihistamines. **Midgie Magic** is also effective against other kinds of insect bites.

• Another useful first aid product for insect bites is **Herbal Skin Calm**, a cooling soothing gel made from infused skin calming herbs such as chickweed, chamomile, nettle, plantain and witch hazel. This gel is useful for any situation when itchiness is driving you mad - eczema, prickly heat, psoriasis, chicken pox, and multiple insect bites.

• **Healing Cream** may also be used for infected bites (Midgie Magic is simply more specialized for insect bites).

• Ice packs applied quickly can alleviate the itch.

REFERENCES


AQUIS, Broome, *Culicoides Talk* (faxed document), 2005
BITING MIDGES IN BROOME

- Biting midges or *culicoides* are the tiny inconspicuous blood sucking flies often (incorrectly) called “sandflies”, which plague visitors and newcomers to Broome and other mangrove regions in northern Australia. Their bites often go unnoticed until hours or days later when they may cause severe itching and inflammation which can lead to infected sores.

- Reactions are caused by the allergens in the female midge saliva when she bites to get a blood meal for her eggs. It is a myth that midges wee on you! Rather, the saliva is injected through the midge’s proboscis to help increase blood flow.

- There is just one species of midges in Broome which bite humans. These live in mangrove and estuarine areas around Roebuck Bay, Dampier and Crab Creek. They do not normally fly more than 2 km from their breeding sites, so they are less prevalent in Cable Beach and Sunset Rise.

- Mostly they feed at dawn or dusk, but occasionally midges can bite all day in enclosed, shaded, still and humid conditions. Their activity seems worst in the few days around the Spring (highest) tides, especially in still conditions.

- In Darwin, midge counts have shown that numbers are greatest in the late dry season, peaking at Spring tides in August and September. Anecdotally, Broome appears to be similar. A pity, as this is “tourist season”.

- Biting midges have their greatest impact on newcomers. We have seen many cases of severe distress, with skin covered in red sores. Most locals build up immunity, so their only reaction may simply be an immediate small pink swelling, which may not even be noticed and which quickly disappears. However, this immunity may not extend to different midges living elsewhere.

- Unlike mosquitoes, biting midges do not carry diseases between people.

USEFUL TIPS

When going outside -

- Avoid outdoor activity near mangrove areas in early morning or late afternoon and evening when midge activity is greatest, particularly during the big spring tides which peak 2 days after the full and new moons. Unfortunately, the beautiful Stairway to the Moon occurs at just these times near mangrove midge breeding areas. So remember to go as protected as possible, and avoid taking small children with you.

- Wear loose clothing covering as much skin as possible and keep sleeves & collars buttoned and pants tucked in socks. Light coloured clothing seems less attractive to midges than dark. Head nets and clothes treated with repellent or low toxicity surface sprays can be useful.

- Use personal insect repellents. What kind?
  - There are many DEET based products such as Rid, Aeroguard, Bushman’s etc which are effective. However, our web searches leave us with serious concerns about DEET.
  - Many people prefer natural repellants such as Hidden Valley’s *Pestoff*, which is effective if properly used - applied to all exposed skin every 2 hours. The active ingredients include neem oil, a natural insecticide, a synergy of several pure essential oils, and an extract from a traditionally used local plant.

- Washing regularly with *Broome Bug Soap* helps to repel midges, as many caravanners and campers have testified. The neem oil (natural insect repellent) and essential oils in the soap smell unattractive to midges. Do not rely on this soap alone as a repellent.

- Vitamin B1 (thiamine), when taken for several months, is said to reduce allergenic reactions, allowing the body to develop its own immunity to midge bites (not scientifically proven).

- Avoid taking babies to midge infested areas. Use loose weave muslin wraps and in an emergency, try a thick layer of mineral oil (baby oil) with a drop of two of lavender (no more than .5%) on exposed skin - although not normally recommended, this oil sits on the skin and may prevent insects gaining a purchase.

- If you’re really desperate, shelter downwind near a smoky fire. Try burning dung or aromatic foliage from local plants such as *Hyptis* (horehound), *Vitex* (black plum), *Calytrix* (Turkey bush), *Melaleuca* species (paperbarks), *Eucalyptus* species (gum trees). The small plant *Pterocaulon serrulatum* is burnt or the leaves rubbed on skin by Aboriginals in the Katherine area to repel mosquitoes. Cover the skin with mud or oil (the latter stops midges being able to land), bury yourself in sand, or just keep running!

Inside -

- Use insect repelling candles and essential oils such as Hidden Valley’s *Pestoff Soy Candle*. This contains a high 6% insect repelling oils and can be burned in moderate breezes or with fans. Or use *Insect Pure Essential Oil Blend*, in an oil burner. Or try burning mozzie coils.

- Use fans if available as midge activity is reduced by moderate breezes. Shut doors and windows on the still side of the building. Position tent openings toward the prevailing breezes.

- Use insect screens with small mesh size & treat them with low irritancy surface sprays. Most ordinary mozzie nets allow midges in.