

Sydney Olympic Park's Mosquito Control Program

Mosquitoes are a natural part of the wetlands at Sydney Olympic Park and will always be active during the warmer months of the year. However, after heavy rains and following high tides, the number of mosquitoes can rapidly increase to nuisance levels.

The Park's extensive wetlands are natural breeding habitats for freshwater and saltwater mosquitoes. Of these, the saltmarsh mosquito (*Aedes vigilax*) is the most aggressive nuisance biting pest and is active from December until April each season.



How are mosquitoes controlled?

Since 1998, Sydney Olympic Park has worked with scientists from the Department of Medical Entomology, Westmead Hospital on a two-stage program to reduce mosquito numbers in the area so as to improve the comfort of people visiting, working and living in and around Sydney Olympic Park.

The first stage of this program involves reducing mosquito breeding habitat in the Newington Nature Reserve Wetland and Bicentennial Park wetlands by improving tidal flushing conditions.

The second stage involves spraying an environmentally friendly mosquito control product containing the bacterium *Bacillus thuringiensis israelensis* (*Bti*). *Bti* destroys the gut wall of mosquito larvae, killing them before they develop into adults. The product is safe to people, pets, other fauna and the environment.

Larval populations and adults are monitored along with weather and tidal conditions during the warmer summer months to determine when *Bti* should be applied. Adult mosquito populations are also regularly monitored by placing special traps throughout Sydney Olympic Park.

If required, spraying of the wetlands of Newington Nature Reserve and Haslams Creek is undertaken by helicopter in the early morning during low wind conditions. Bicentennial Park is treated by hand, using backpack spraying equipment. Treatment of the wetlands is only undertaken when monitoring indicates an increase in mosquito populations is about to occur.

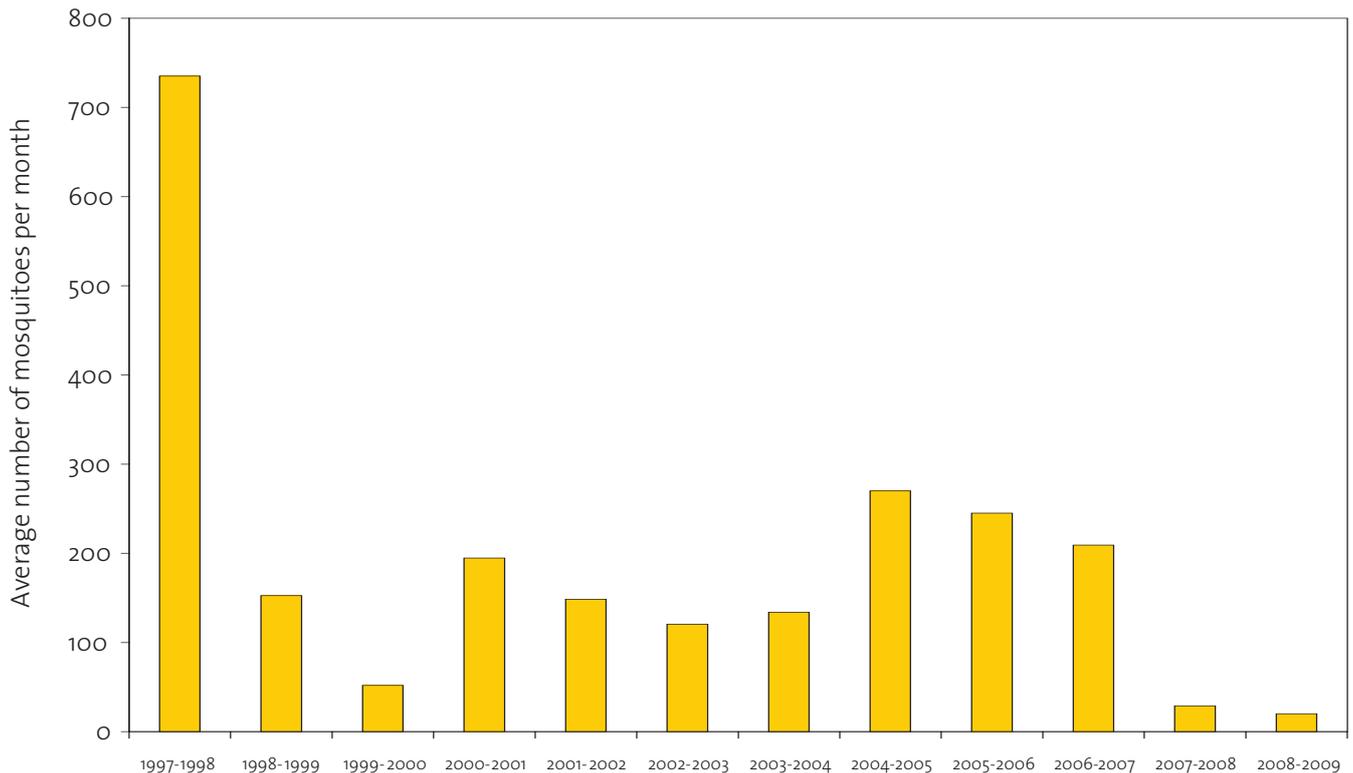
How effective is the program?

Monitoring has shown that larval mosquito populations are generally reduced by 90% or more as a result of treatment with *Bti*. This has led to a significant reduction in nuisance adult mosquitoes at Sydney Olympic Park, Newington and Mariners Cove. Nearby Parramatta, Ryde, Homebush, Auburn, Newington and Canada Bay residents also receive the benefits of these treatments. However, it should be noted that it is not possible to eradicate all mosquitoes in the area. There are also other mosquito breeding habitats outside the boundaries of Sydney Olympic Park that are not managed by the Authority.

Will the control program continue?

The Authority will continue its mosquito control program. The Authority has also been extending its tidal flushing program to progressively reduce the need for aerial spraying.





The above figure shows the average number of saltmarsh mosquitoes (*Aedes vigilax*) collected in 'mosquito traps' in the Newington Nature Reserve Wetland and Bicentennial Park wetlands per month between 1997-2009. The first full season of the mosquito control program commenced in December 1998. The abundance of mosquitoes will vary each year depending on both rainfall and tides.

What you can do?

There are a few simple things you can do to assist in reducing mosquitoes around your home or business and also to avoid being bitten when mosquitoes are abundant. These include:

- Turn off lights when not needed so as not to attract insects
- Install screens on doors and windows
- Ensure that water is not left in containers in the outdoors
- Clean any debris from rain gutters and remove any standing water under or around structures, or on flat roofs
- Check taps and air conditioner units and repair any leaks
- Do not allow water to accumulate in the saucers of pot plants or in pet dishes for more than two days
- Change the water in birdbaths and wading pools at least once a week
- Check tarpaulins covering boats, pools etc to ensure there are no water puddles collecting and drain if required
- If you are undertaking home improvements, ensure that any excavated areas are properly backfilled and graded to prevent pooling of water
- Do not over water lawns and gardens
- Mosquitoes are most active at dawn and dusk so minimising activities close to wetland areas at these times will reduce the risk of being bitten
- Before going outdoors at dawn and dusk, apply an insect repellent containing the active ingredient DEET.

For more information, please call 9714 7300 or visit www.sydneyolympicpark.com.au