

## Millipede Barrier 2011 June Update and Final Report

Over the past 12 months Mindarie Regional Council (MRC) has completed a 984 meter long galvanized barrier which extends along the southern fence line adjoining Kinross Residential area. Also 20 water light traps were placed along this barrier to capture millipedes moving up and down this area.



### Millipede Barrier - Concept and Design

The Millipede Barrier was specially designed to stop the migration of millipedes from MRC land into Kinross Residential area. The first trial involved a 1m square galvanized box around 40 cm high ?? with a hole in the top. Captured millipedes were placed into the box and daily recordings were taken to see if any millipedes escaped. From this trial the barrier roof was tilted 40 degrees downward thus stopping the millipedes from climbing out of the box.

### Millipede Barrier - Trial and Installation

The Millipede barrier was installed in three stages, with the first stage some 200 meters being installed in July 2010 as a trial. During the winter months of 2010, periodic inspections of the barrier and adjoining streets to the southern fence line were carried out after significant rainfall events. As we all know, winter 2010 was very dry and these events were far and few between. However the millipede barrier showed to be effective in reducing the number of millipedes crossing over the boundary where it had been installed. This enabled stage two and three to be installed with confidence knowing that the barrier would hold back the millipedes from marching into Kinross. These stages were completed by March 2011.





### **How it was installed**

Firstly each post along the 984 meter fence was a different distance from each other therefore, each post was measured and coded. This allowed for easy installation when the specific lengths were delivered and matched with the code. Dirt along the fence was pushed aside allowing each galvanized length (around 4m) to be tec-screwed onto the post. The tilted portion of the barriers not attached to the post was tec-screwed onto the next code piece of galvanized sheeting. Once the sheeting was attached to the posts, dirt was pushed back making sure that no holes were under the barrier. As each stage was completed, dirt holes were checked and sealant was used to infill caps in the sheeting joins.

### **Nematode Introduction**

In addition to this physical barrier, Kinross residents were asked to collect millipedes along with MRC staff in the winter of 2010. Captured millipedes were placed in bins to help breed up nematode numbers to the point where they were released within the MRC bushland adjacent to the southern fence line during winter 2010.

It will be some time before we know if the nematodes are effective. They will need to build up their numbers before they can make a significant difference to the millipede population.

### **What to do next?**

With winter upon us once again, we must stay vigilante in reducing the numbers of millipedes on either side of the barrier.

### **MRC Ongoing Commitment to the Millipede Barrier**

The Millipede Barrier inspection occurs daily by our groundsman. During this time the officer is checking empty light traps in winter, damage to the barrier (from unauthorised visitors from over the fence), and millipede activity. In addition the barrier has been incorporated into our Weekly Environmental Inspection as part of our ISO 14001 Environmental Accreditation. From this an action was recently raised to the growth of weeds along the barrier. The action resulted in the barrier being incorporated into MRC's Weed Management Plan which is currently underway and scheduled for this time again in 2012.

### **Operation Millipede**

#### **Millipede Control at Home**

Management - Portugese millipedes are attracted to light. Turn off external lights that are close to buildings and minimise the escape of light through use of curtains, blinds and weather strips on doors. Efficient door seals can prevent their entry to your home.

Clean up areas - Millipedes in the house and garden will probably have emerged from eggs laid within 100 meters from your home and while compost is good for gardens, it also allows higher populations of millipedes to develop. Reducing the area covered by organic matter such as compost, leaf litter and mulch will help reduce millipede populations by diminishing

food and areas of shelter.

#### Physical Barriers

- Continuous, smooth barriers can stop millipedes from entering homes because they cannot cross smooth, vertical or rounded surfaces.
- Plate glass, 75mm wide and 45mm thick can be set around the base of your home. Millipedes cannot gain a foothold on the smooth surface.
- A moat and trap system installed around your home. Use 100mm c-Purlin with a return lip, buried flush with the ground. Millipedes fall into the moat and cannot escape the overhanging sides.
- A less permanent barrier can be installed using a side, smooth vinyl, polypropylene or polythene tape fixed to the wall.
- Light traps that attract millipedes at night have also offered good control