ADULT PLAGUE LOCUSTS AND SWARMS

November 2010

In what is predicted to be the worst plague locust outbreak in at least 30 years, locust swarms are inevitable this season.

Initial adult populations are likely from November, depending on temperatures and weather conditions.

NSW's $18.5 million control campaign continues to target young locusts – while they are grounded and unable to fly and as they group together in thick bands.

This is the most effective time to control locusts and by strategically targeting young locusts we reduce population levels, swarm potential and minimise damage to crops and pastures.

Reporting swarms

As with locust hatchings, it is critical that landholders monitor swarm activity on their property and report any sightings to their local LHPA.

Favourable seasonal conditions have the potential to lead to multiple generations this season. If eggs are laid by adults in coming weeks they may hatch from mid-December and into January, producing a second generation of adults.

Reporting of swarms assists I&I NSW and the LHPA monitor swarm movements and, importantly, identify where egg laying is likely to take place and where to expect 2nd generation hatchings.

Latest information on swarm activity is also critical for ongoing control measures, targeting adult locusts themselves or future generation hatchings.

Controlling swarms

NSW's control efforts target young locusts – while they are grounded and unable to fly and as they group together in thick bands.

This normally occurs 2-3 weeks after peak hatching and is the most effective and efficient time to control locusts to minimise damage to crops and pastures.

Swarms are much more mobile and more difficult to treat. A swarm is also significantly less dense than banding, young locusts, and can contain 90% less locusts. This means control measures are less targeted and more chemical is required.

Large numbers of adult locusts may be treated when they are 'roosting', by spraying early in the morning or at dusk. While this is less effective, adult control measures can reduce population levels and minimise subsequent generations. Speak to your local LHPA about treatment and insecticide options for controlling adult locusts.

Aerial control of swarming adults is not a preferred option and is only used if locusts reach levels which justify the cost and when safety and environmental requirements can be met.

Swarm damage

The locust can be a devastating pest to agriculture, causing significant damage to both crops and pastures.

Adult locusts in particular are highly mobile and can move through green crops and pastures very quickly.

Locusts can migrate up to 600 km or more in a single night, infesting areas up to 50 km^2. A swarm, covering 1 km^2, could contain anything from 4 million to over 50 million individual locusts.

Spring swarms can potentially cause damage to winter cereal crops. As cereal crops ripen, locusts may continue to cause serious crop damage from head lopping, as they chew through the last green tissue (node) on the stem just below the head.

Emerging summer field crops, such as cotton, are also very susceptible to swarm damage.

Adult locusts can also cause serious damage to pastures in a short amount of time. A swarm covering one kilometre can eat up to 10 tonnes of vegetation per day.

Locust contaminated grain may also have to be cleaned to meet harvest receival standards.

Driving through locust swarms

Motorists travelling through locust swarms should take the following precautions:

- Be aware that visibility may be reduced if travelling through a swarm.
- Ensure their windscreen wiper tank is full and carry a rag to wipe off excess insects if necessary.
- Lights may also need cleaning.
- Check your front grille, which may require cleaning, to avoid blockage of air inlets.
- It may be advisable to fix a mesh insect screen to the front of the vehicle.
- Slow down gradually when driving through swarms and use headlights if necessary to alert oncoming traffic. Be aware that other drivers may have difficulty seeing you.
- Monitor the temperature gauge for signs of overheating.

Plague locust control for the home gardener and nursery areas

Plague locusts may impact on towns as well as rural areas. As a result, many home owners are concerned about potential damage to gardens and houses, as well as effects on pets. Information on controlling locusts in urban and nursery areas can be found here.

More information

- Locust reporting, insecticide and enquires - contact your local Livestock Health and Pest Authority
- General information – see the I&I NSW locust website