For many years farmers have had problems with birds consuming livestock feed and defecating in feed/water and onto equipment and building components. These problems raise concerns about economic efficiency, animal health and equipment and building maintenance. There are a number of management strategies to remedy/reduce some of these problems. This article provides information on starling damage management.

There are several pesticide products that contain the chemical DRC-1339. However, only Starlicide Complete from Earth City Resources is available commercially. See their website at http://www.ecrproducts.com/rodenticides/product/starlicide_complete/ for information on the product and retailers in your area that carry the product. The product is a mixture of poultry grain pellets and the active toxicant. Not all of the grain pellets contain the active ingredients. Producers can purchase this product and use it on their own farm. However, Starlicide is a restricted use chemical and producers must be certified applicators to purchase and use the product. They must submit a written application (Repel and Destroy Wild Birds, DNR Form 2300-080) and obtain a Department of Natural Resources (DNR) permit to apply the pesticide. There is no fee for the permit and they can be obtained through the regional DNR office.

These suppliers will provide instructions on the use of the pesticide. The pesticide works best in the winter when there is snow on the ground and few other sources of feed are available for the starlings. Pre-baiting for several days with a non-treated poultry pellet prior to using the product greatly increases the success rate of the product. Plan to obtain the pesticide in late fall to early winter, as it is only available seasonally and has a short shelf life. Winter use also helps to limit the effects of the population management program to the intended species.

Commercial structural pest control companies may offer Starlicide Complete as part of their service. They may also offer Avitrol for controlling a variety of birds. The active ingredient in Avitrol is 4 Aminopyridine which is different from DRC-1339. Avitrol is a chemical frightening agent that causes the birds to emit a distress call which causes other birds to depart. Generally this product is not as effective for more than a few days. It is no longer being manufactured and only supplies on hand can be used. Registration with the EPA is pending on this product. For more information on Avitrol, access the web site at URL: http://www.avitrol.com/

The other products containing DRC-1339 are not available for public use, but are registered for use only by the USDA, Animal and Plant Health Inspection Service (APHIS), Wildlife Services program. Wildlife Services has registered Compound DRC-1339 Concentrate for agency use to assist farmers in managing problem starlings in feedlots and dairies.
The Wildlife Services Offices in Wisconsin are located at Waupun (920) 324-4514 and Rhinelander (715) 369-5221. Specialists with Wildlife Services can advise producers about non-lethal, long-term starling damage management practices. The specialist will advise producers about communicating with neighbors on the population management plan.

For a fee, an APHIS Wildlife Specialist will obtain the DNR permit and provide the producer with a specially formulated product to pre-bait the starlings. The success of a pre-baiting program is greatly increased with a pre-baiting program. Pre-baiting is the process in which untreated bait is made available to pest birds for several days to establish a feeding pattern. During pre-baiting, one can also determine whether nontarget birds are also present. High protein and high fat baits are particularly attractive to starlings.

After the birds have become accustomed to eating the pre-bait (typically from 5-10 days), the Wildlife Specialist will apply the toxicant in the morning on the day of treatment. The toxicant will be removed no later than the end of the day the toxicant was applied. Within 24 hours of a treatment, the Wildlife Specialist will return to pick up dead birds on the property and, if requested, any neighboring properties. “Managing Starling Conflicts at Dairies & Feedlots in Wisconsin” is a flyer distributed by the Wisconsin Wildlife Service to describe the program.

The toxicant DRC-1339 works by destroying kidney function in the birds that consume it. Starlings that consume the product begin to show signs of lethargy within 6-8 hours and die within 24 hours. By that time virtually all of the toxicant in their body has been metabolized and excreted, effectively eliminating the possibility of secondary poisoning if the dead birds are eaten by other birds or mammals. Therefore hazards to non-target animals are extremely low.

There are several publications on this and several other pest control topics on the Wildlife Damage Management web site located at URL:  http://wildlifedamage.unl.edu/

**Starling Control**

**Animal and Plant Health Inspection Service (APHIS) Wildlife Control Fact Sheets**

**Extension Web Site on Starling Control**
http://www.extension.org/pages/Starlings