

# Vertebrate Management



Pecan IPM Toolbox

- ☞ Crows, blue jays and squirrels can cause severe losses to pecan crops.
- ☞ Heavy losses are most often recorded when pecan crops are short and feeding becomes localized due to food availability.
- ☞ Prevention of losses depends largely on early detection and initiation of control measures.
- ☞ Once feeding patterns become well established, they are difficult to change.
- ☞ Control measures must be persistent and varied regularly to be effective.
- ☞ All the animals that cause pecan losses are protected by various state and federal laws.
- ☞ Before beginning control measures, the local Game Warden should be consulted.

## Feeding Habits

- ☞ Crows and blue jays behave differently, but frightening efforts affect them the same way.
- ☞ While crows may feed on pecans of any size, blue jays are normally restricted to the smaller varieties.
- ☞ Orchard location affects the amount of predation experienced each year.
- ☞ Orchards that are located adjacent to existing stands of trees will experience greater losses to all predators, due to the proximity of native cover.

## Chemical Control

- ☞ Avitrol® is the only registered chemical available for use in this type situation.
- ☞ It is restricted for use by, or under, the supervision of government agencies or licensed pesticide applicators.
- ☞ Avitrol is designed to affect only a small number of the birds present.
- ☞ The affected birds produce distress cries and very erratic behavior, which scares the remainder of the flock from the area.
- ☞ This chemical may be effective in some areas.

## Persistence is the Key

- Effective control measures require early detection of losses and establishment of an aggressive control program.
- The control program should include a combination of the previously mentioned devices.
- Efforts must be persistent and the noise-producing devices must be relocated and/or alternated regularly to prevent conditioning of the birds.
- Stationary sound devices should be supplemented with shell crackers or noise bombs that are exploded in the air over the birds, if possible.
- Human activity in the orchard is especially important.

## Bands, Artificial Snakes and Noise

- ☞ Squirrels may be excluded from trees by encircling the trees with 2-foot-wide bands of metal located six to eight feet above the ground.
- ☞ A 10-foot clearance should be maintained between trees to prevent them from jumping from tree to tree.
- ☞ In individual trees, squirrels may be repelled by locating artificial snakes along their travel routes.
- ☞ In orchards, the exploding-type noise devices used to repel birds should also help to repel squirrels.

# Suppliers

## Vertebrate Management

**Pyrotechnic Devices** - exploding or noise-producing devices fired from specially designed pistols or shotguns.

☞ **Marshall Hyde, Inc.**  
Box 497  
Port Huron, Michigan 48060  
Phone 313/982-2140

☞ **Soneco, Inc.**  
Dacono, Colorado 80514  
No address or phone available

**Automatic Exploders** - machines designed to produce loud explosions at regular intervals; operated by acetylene or propane gas.

☞ **B. M. Lawrence & Company**  
351 California Street  
San Francisco, CA 94111

☞ **Alexander-Tagg Industries, Inc.**  
935 Jacksonville Road  
Warminster, PA

☞ **Bird-X**  
325 West Huron Street  
Chicago, IL 60610

☞ **Smith-Roles**  
1367 South Anna  
Wichita, KS 67209  
Phone 316.946.0925

☞ **Hub States Corp**  
2000 N. Illinois St.  
Indianapolis, IN 46202

**Avitrol** - a chemical agent used to frighten birds (trade name Avitrol); used only by licensed pest control operators or government agencies

☞ **Avitrol Corp**  
7644 E. 46th St  
Tulsa, OK 74145

**Sound Devices** - devices that produce sounds that repel or attract birds

☞ **Bio-Sonics Control Company**  
1 5259 Highway 128  
Claistoga, CA 94515

☞ **Electronic Game Calls**  
270 W Grand Ave  
Wisconsin Rapids, WI 54494

☞ **B. M. Lawrence & Company**  
24 California St  
San Francisco, CA 94111

☞ **Bird-K Inc.**  
325 W Huron St  
Chicago, IL 60610

☞ **Arkansas Electronic Consultants**  
8000 Stanton Road  
Little Rock, AR 72209

☞ **Signal Broadcast**  
2314 Broadway  
Denver, CO 80205

☞ **AV-Alarm Corp**  
P. O. Box 2488  
Santa Maria, CA 93454