MOSQUITO CONTROL by Stanley Rachesky Entomologist, University of Illinois

Have you ever been arrested for killing mosquitoes? Just the other night, after one of our many rainstorms I was attempting to relax in the backyard in my favorite lawn chair. However, it turned out to be a very bad choice. The mosquitoes were just awful! I decided to try fogging the yard using a new electric hand-fogging unit. It really laid down a good thick fog. Our police department didn't konw what I was doing and they thought the house and garage were on fire. They're extra cautious in our town because last year they demolished a police car — it became lost in the fog of a commercial fogger hired by the town. Next time I'm supposed to tell them when I fog — did you ever!

It's quite easy to recommend what to do for mosquito control — but does it work? Light traps have been making a splash on the shelves of some garden centers; they don't work. We tested one using what I call "the slap count method." One evening we sat out in the backyard slapping mosquitoes every time they'd land on one of us. We did this with and without the trap. No relief at all was achieved — both slap counts being almost equal.

The first thing each individual homeowner can do for mosquito control is to eliminate all standing water on your property e.g. rain gutters, old tires, tin cans, the kid's toys, etc. Don't forget to change the bird bath regularly! Next, hook up the little bottle that fits on the end of your garden hose (hose-end sprayer) and apply according to label directions, 0.5% Malathion (1 oz. of 50-57% concentrate Malathion to 1 gallon of water). Spray your grass and shrubbery. This should be done every 5 days. It does a great job if applied about 4-5 hours before a Sunday evening cookout. Also purchase a pressurized spray can containing 1% Pyrethrin or 0.5-1% DDVP. Spray the mist very lightly beneath tables, chairs, etc. Keep it on hand if the mosquitoes are numerous. Repellents do a good job and should be used on arms, legs, neck, etc - exposed parts of the body.

The Malathion application should knockdown about 40-60% of the insect problem. A small hand fogger for very temporary control will immediately knockdown the flying insects and "clear the air of mosquitoes" for a short while. DDVP (Dichlorvos), Pyrethrin, or Dibrom (Naled) are the insecticides already prepared for use in home fogging units and are readily available at your local garden center. Fogging units are also available for use on your lawn mower. Make sure your lawn mower is the type on which a fogging unit can be adapted.

For control of mosquitoes, gnats or flies inside the house keep your screens in good repair. The plastic resin strips advertised do an excellent job in the house. They contain 20% DDVP (Dichlorvos). One strip should be used for every 1000 cubic feet of room space (Length x width x height). The insecticide vaporizes very slowly killing mosquitoes and other flying insects without harming people or pets. They are effective from two to three months. The strips have a tendency to drip in hot weather. Keep them out of reach of the kids, away from fishbowls and food counters. They must be used only in a closed room.

Once again pressurized spray cans containing either Pyrethrin or DDVP are excellent for quick knockdown in the house. Water is necessary for mosquito breeding. The adult female mosquito will lay eggs on standing water or in places that will later become flooded. Egg hatch will occur 2-5 days. It takes only a week for the larva to become full grown. The pupae (cocoon stage) transforms to adults in about 2 days. Once again two days later the female adults are ready to chowdown. Male mosquitoes do not bite man. They feed on plant juices and flower nectar. Adult mosuitoes will migrate several miles from outlying breeding sites into urban areas.

Local government agencies spend a great deal of money in an **attempt** to control mosquitoes to provide a more comfortable and healthier place to live for the people.

Organized countrywide mosquito abatement districts are the most effective means of combating mosquitoes in and around an urban area. Trained and experienced personnel with an adequate budget and support of both public and local governments can effectively control mosquito problems. The understanding and cooperation of the general public is necessary if the program is to be a success.

Plan insecticide usage and apply properly.

1. Use only those insecticides, dosages, intervals, and methods of application approved by the Illinois Department of Public Health or the University of Illinois. Do not contaminate the environment.

2. Prehatch treatments should be applied in late winter or early spring to breeding areas known to produce a spring generation of mosquitoes.

3. Apply treatments to breeding areas that cannot or have not been permanently eliminated during the warmer seasons. This is done to kill the mosquito larvae before they become biting and egg laying adults.

4. Residual spray applications or mist applications should be applied when needed to kill adults that come from outlying areas. Fogs, because of their visibility, can be seen better than sprays or mists and therefore possess a psychological benefit that is not necessarily proportional to biological effectiveness.

Community officials considering mosquito or other insect control program should be well **informed**, usually they are not. They should first consult with the State Department of Public Health in Springfield, or the University of Illinois for advice and suggestions.

