Promoting beneficial insects, pollinators and predators

Do you agree with the idea that “The only good insect is a dead insect”? Of course not. All good farmers know there are beneficial insects in crop fields, both above and below ground. But you may not realize how many species of various biological life forms exist and exactly how valuable they are to your crops.

At the Conservation Tillage Conference, March 4 at Ada, Jonathan Lundgren will share some surprising results from his research on how pests such as corn rootworm and dandelions can be managed by natural enemies. Dr. Lundgren is an entomologist with the Agricultural Research Service, USDA, in Brookings, South Dakota, who also spoke at the National No-Till Conf. last month. At CTC he will speak on the “early bird” Cover Crops program at 8:30 on “Using Cover Crops as a Pest Management Tool”, then again at 11:00 during the Corn University session, “Encouraging Beneficial Insects and Pollinators in Corn.”

Here are a few points he will highlight:

Cover crops help get rid of rootworms. Predators eliminate more than 95% of rootworm eggshells. About 50 insect groups eat these eggs and larvae, so they never become adults.

Ground beetles, ants, crickets and other “good” insects are great for consuming weed seeds, including dandelions.

In one typical corn field, Lundgren and his assistants found about 200 beneficial insects. In the crop canopy, only 7% of insects they found were pests.

Entomologists have identified 174 species of pollinators. Honeybees are not the only pollinator that we need to protect.

We need to tailor conservation efforts to the entire community of predators, not to individual species. No-till, cover crops, crop rotation, and intercropping can all help maintain populations of predators. Field borders can also serve as hosts.

In terms of chemical use, many insecticides, including GM crops, are not needed. Many are used as “insurance.” Lundgren asks a logical question: “Insurance against what?”

Healthy soil

Dwayne Beck has been no-tilling for 30 years. He is a plant scientist with South Dakota State University who is internationally known because he runs a no-till research farm along the Missouri River near Pierre. The research farm is one hundred percent no-till because he figured out years ago that we already know all that’s needed about plowing: what’s needed is learning how to make continuous no-till even better.

Dr. Beck, will speak at the general session of the Conservation Tillage Conference, March 4, on the topic “Healthy Soil: We know one when we see one.” He will speak later in the Cover Crop session, “Improving Your Crop Rotation and Nutrient Management with Cover Crops.”

Many factors contribute to soil quality. One is compaction. Beck tells this story: “A civil engineer friend of mine who builds roads asked me why farmers still tilled their fields. I told him that I really didn’t know; maybe it was because they thought they were breaking up compaction. The engineer thought about it a while and said, ‘I disk and drive on a roadbed to make it hard...one of us is wrong.’”

The full CTC program and registration information are on the website: ctc.osu.edu. In addition, flyers are in county Extension offices. Registration is $65 for one day, $85 for both.

Four concurrent sessions begin after the March 4 general session, and continue with four more all day March 5.

One session Wednesday afternoon, Precision Farming, includes a presentation on “big data”, and a panel discussion on Unmanned Aerial Systems for Agriculture by four experts from industry and the Air Force.

Major CTC Contributors

In addition to OSU and USDA, major financial supporters include: Ag Credit, Dekalb/ASGROW, Cover Crop Solutions, Seed Consultants, Pioneer, Ohio Soybean Council and Ohio Corn & Wheat Growers. And FHR Nutrient Management is sponsoring a Social Hour on Tuesday at 5:30.