By Carolyn Raffensperger

Bees Win Pesticide Case; Birds Next?

n a landmark case, the Minnesota Supreme Court has just ruled that property owners owe honeybees reasonable protection from harm. This case is significant not only because it establishes a duty of care owed to insects but also because it could help reverse the steep decline in pollinators.

Pollination is the process by which pollen released from a plant anther is carried by the pollinator to the stigma of (usually) another plant flower. Pollen tubes are produced by each pollen grain. These tubes grow down into the plant ovary and carry the sperm into the embryo sac where the egg is fertilized. The whole ovary grows into a fruit containing one or more seeds.

One in every three bites of food that humans eat requires an animal pollinator — usually insects but also birds or bats. (Some plant species depend on the wind.) Unfortunately, keystone pollinators are in such precipitous decline in the United States that pollination of many crop plants is in jeopardy. For instance, southern states trying to replace tobacco as a crop doubt that they have enough pollinators for alternative, high-end crops.

Many commercial crops rely on honeybees for pollination. In 2000 a Cornell University study calculated that the honeybee contributed \$14.6 billion annually in food crop value. Commercial apiaries provide this service, moving their hives from zone to zone as various crops bloom and require pollination. For instance, apiaries rent space in the summer on our 3,700acre organic farm in North Dakota, pollinating our buckwheat and other

SCIENCE FOR LAWYERS

crops and producing valuable honey. The apiaries then move the hives to California in the winter.

It was this kind of mobile apiary that was at issue in the Minnesota case of Jeffrey Anderson et al. v. Minnesota Department of Natural Resources and International Paper Co.

The facts of this case began in 1997, when the Minnesota Department of Natural Resources applied the insecticide Sevin aerially to control the cottonwood leaf beetle in its plantations of hybrid poplars, grown in a demonstration biomass electric fuel project. The following year International Paper discovered that its poplars were also infested and hired contractors to spray Sevin XLR Plus to control the beetle.

Beekeepers who had hives in the area observed high mortality among their bees and filed complaints with the Minnesota Department of Agri-

The label directions of Sevin XLR Plus specifically addressed bees. The label indicated that precautions should be taken because the product was "highly toxic" to honeybees. The instructions included the following warning: "Do not apply this product or allow it to drift to blooming crops or weeds if bees are foraging in the treatment area."

The court's judgment hinged on the difference between foraging and trespassing. The question was whether bees, which were on land owned or managed by the Department of Natural Resources and International Paper, were to be treated like trespassing livestock.

Farm animals such as cattle often break out of pastures and wander into other farmers' fields. They can wreak havoc, trampling grain, breaking fences, and breeding. Common law has evolved rules for the duty owed to the cattle and to the farmer who has been trespassed. According to the court, "In Minnesota, a landowner owes only a limited duty to trespassing livestock." The owner of trespassing animals can be held liable on the basis of "willful or wanton negligence," although once the trespassing animals are discovered the trespassed landowner is "bound to use reasonable care to avoid injuring them."

The Minnesota court had to ask

whether honeybees were like cattle and were trespassers or whether they were in a different category. The court ruled that honeybees are foragers, not trespassers, and pesticide applicators and property owners owe bees that forage on their land reasonable protection from harm.

In a footnote, the court said, "As a general rule, trespassing livestock must have committed a 'wrongful entry' in the land possessor's eyes." But the court indicated that with bees there is no wrongful entry since they benefit the party who hosts the bees: "Accordingly, it might prove problematic to characterize bees as unwelcome on land where trees and other vegetation are grown for commercial purposes, particularly where agricultural need for bees is at least as great as the need for pesticides."

The court asserted jurisdiction, deciding that the Federal Insecticide, Fungicide, and Rodenticide Act preemption of state common law litigation did not apply here. The court found that "FIFRA preempts state-based negligence actions premised on breach of warranty, failure to warn, and other causes of action impinging on the EPA's power to enforce labeling requirement. Other state-based negligence actions are permitted."

In sum, the court held that "a land possessor with actual knowledge or notice of foraging honey bees on the property comes under a duty of reasonable care in the application of pesticides."

This case holds promise for all insect pollinators. Consider the monarch butterfly, which has declined by about 75 percent in recent years. Millions have died due to pesticide use, logging in Mexico, and loss of Midwest summer habitat. Monarchs are important pollinators of native species. Without them our world is immeasurably impoverished.

Cases like the Minnesota honeybee decision will protect not only the honey bee and our apples, pears, almonds, oranges, buckwheat, and melons, but also our most beautiful winged insects. May all states follow Minnesota's lead.

Carolyn Raffensperger is Executive Director of the Science and Environmental Health Network in Ames, Iowa. She can be reached at raffenspergerc@cs.com.