Take a closer look:

The deaths of some 20,000 Swainson’s Hawks in La Pampa, Argentina, was a shrill wake-up call to the bird-conservation community that pesticides and other chemicals are still a threat to birds. The hawks had consumed grasshoppers poisoned by monocrotophos, an insecticide banned in the United States in 1988. The incident clearly underscored the need to stop export of known deadly pesticides. But this is only one facet of a very complex issue which encompasses pesticide use and its potential impact on birds, not just in distant wintering grounds, but in northern habitats as well.

Despite the banning of notorious insecticides such as DDT (linked to population declines of Bald Eagles, Peregrine Falcons, and Osprey) and the formulation of laws to regulate pesticide production and use, birds still suffer pesticide exposure in this country. Exposure does not necessarily cause incidents on the scale of the Swainson’s Hawk die-off, but it may be posing a less perceptible but equally insidious threat to some bird populations.

Over 40 active ingredients, the majority of which target insects, have been linked to migratory and resident bird die-offs involving anywhere from one to 20,000 individuals. At least nine of these active ingredients have been canceled or banned for use in the U.S., but are still exported by the U.S. for use in other countries. Like monocrotophos, many of these ingredients are likely still used in countries where migratory birds winter and are still used illegally in this country.

Cornell University researchers have estimated that some 672 million birds are exposed to pesticides each year. Birds experience direct exposure through consumption of pesticides that resemble seeds, inhalation of pesticide fumes, and absorption of pesticides through the skin. Indirect exposure occurs when birds consume pesticide-laden prey. Certain active ingredients of pesticides reach greater concentrations in each successive predator along the food chain. This bioaccumulation of toxins can be deadly to birds feeding on fish, insects, worms, or other birds.

**Lethal Ingredients**
The following six active ingredients used in pesticides are of particular concern given their proven toxicity to wildlife:
- Aldicarb
- Azinphos-methyl
- Carbofuran
- Diazinon
- Ethyl Parathion
- Phorate

All are organophosphates or carbamates. All are used in U.S. crop production, and Diazinon in particular is commonly used for home lawn care.


**You can help:**
- Do not use chemical fertilizers and pesticides on your lawn. Plant native species and use natural products.

**What’s Available:**
**Kids for Saving Earth (KSE)**
Cost: $7 per person
$9-15 per classroom, family

Learn how you can help protect Earth with your own Action Guide and more!

Kids for Saving Earth
P.O. Box 421118
Minneapolis, MN 55442
http://kidsforsavingearth.org
Activity: Earth-Friendly Recipes

Grade: K-12
Time: 20 minutes/recipe
Materials: recipe cards, scissors, ingredients listed on cards.

Pest Spray for Plants
Ingredients:
1 clove garlic
1 small onion
1 teaspoon black pepper
1 tablespoon cayenne pepper
1 quart of water
1 teaspoon liquid soap
1 spray bottle
Chop garlic and onion, mix with black pepper and cayenne pepper in water.
Let it stand for an hour, then add liquid soap.
Strain into spray bottle.

Flea and Tick Spray
Ingredients:
1 teaspoon vinegar
4 cups water
1 spray bottle
Mix water and vinegar and pour the solution into a spray bottle. This makes enough to wash 40 pounds of dog!

Try These Earth-Friendly Recipes!
You can prepare these recipes and give them to your family and friends. Or give these cards as a gift.

REMEMBER! Although these ingredients are “natural,” they can still be dangerous. Use carefully!

Mothball Substitute
Ingredients:
cedar chips
lavender leaves
bay leaves
used fabric pieces
scissors
ribbon, yarn, or rickrack
Instead of mothballs, use cedar chips or herb sachets. Cut squares of used fabric. Put dried lavender or bay leaves in the center of each. Tie with ribbon or rickrack.

Adapted with permission from Action Guide, from Kids for Saving Earth.
**Bathroom Cleaner**

**Ingredients:**
- baking soda
- sponge

**Use baking soda instead of powdered cleansers to clean toilets and sinks.**

---

**Glass Cleaner**

**Ingredients:**
- 1 cup vinegar
- 8 cups water
- 1 spray bottle

**To make a great glass-cleaner, mix one part vinegar with 8 parts water and put it in a reusable spray bottle. Spray windows and wipe dry with a reusable rag. No paper towels!**

---

**Drain Cleaner**

**Ingredients:**
- baking soda
- white vinegar

**To make an Earth-friendly drain cleaner, mix equal amounts of baking soda and warm, white vinegar. Be careful— it will foam! Pour down drain and let it stand for fifteen minutes. Then flush the drain with boiling water. Don’t try this without an adult to help!**