

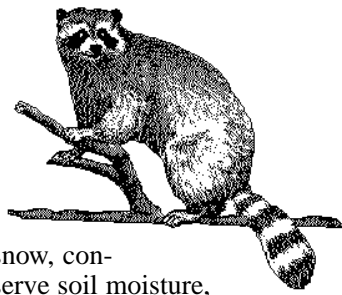
# Planting Designs With Wildlife in Mind

Windbreaks are planted to protect farmsteads, livestock, roads, or crops. The additional goal of providing wildlife benefits can be added without compromising the primary purpose. In developing a plan, select a design, plant materials, and location to meet your specific windbreak needs but include factors that benefit wildlife.

Below are some designs

cover reduces soil erosion and, on the leeward side of windbreaks, wildlife have a food source in a sheltered spot.

- Consider planting or leaving herbaceous vegetation such as a mixture of grasses and legumes, grain, or stubble as a border, 20 to 50 feet wide, along the edges of windbreaks, but avoid competition with new plantings by keeping a clear area next to the trees. This provides



snow, conserve soil moisture, and increase net crop yields. They can provide benefits as travel lanes and as feeding, loafing, and/or nesting sites for birds such as pheasants, quail, mourning doves, and songbirds. To enhance the value of field windbreaks for wildlife:

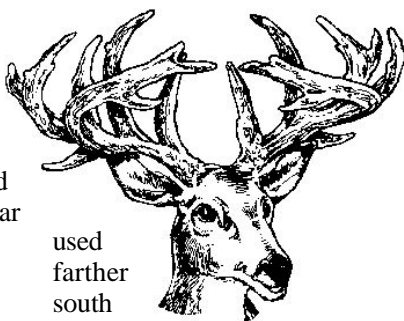
- Choose a variety of trees adapted to the site and that have wildlife benefits, and plant them so there is a mix of tree types within and among rows.

- Alternate trees and shrubs within the row, or consider adding a shrub row immediately next to the tree row on the leeward side. Stagger the tree and shrub rows to better fill gaps. Shrubs will provide critical ground cover and add foraging and nesting sites near the ground.

- Where possible, add a row of shrubs around the field edges to connect the windbreak rows. These provide safe travel lanes plus additional foraging and nesting sites.

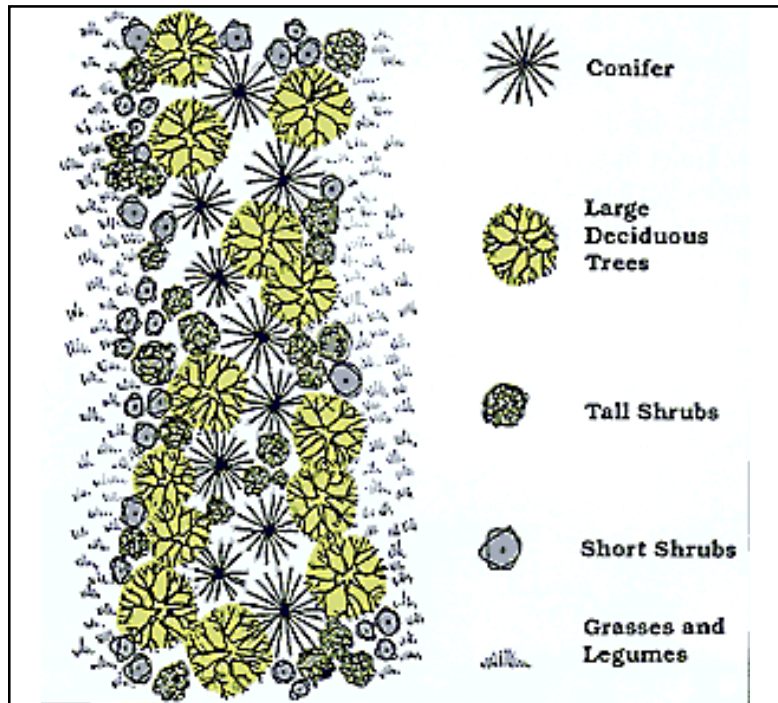
Farmstead and Livestock Windbreaks. Windbreaks with four or five rows are commonly used to protect farmsteads or livestock. Greater width may be necessary for wildlife protection in winter in northern climates. For example, eight-row windbreaks have been recommended for wildlife protection in Minnesota, and more than eight rows may be needed to provide ample winter protection in Manitoba and North Dakota.

In contrast, one- to three-row windbreaks are commonly



used farther south in areas such as the Texas panhandle. In general, greater width provides better winter protection. An ample ground cover layer, availability of food resources, and connections with larger blocks of protective cover are also critical factors in winter survival for pheasants, quail, and other wildlife. If an established windbreak fills with snow or otherwise does not offer adequate winter habitat, consider adding the needed plantings to improve it. Below are some design tips for a five-row windbreak.

- On the windward side, often the north or west side, use two rows of evergreen trees such as eastern redcedar, Rocky Mountain juniper, or other native conifer species. Spruce



with tips on improving windbreaks for wildlife.

### Overall Guidelines

- Choose trees and shrubs that have wildlife benefits, but are adapted to the local climate. Generally, native species are the best because they are adapted and familiar to wildlife.

- Include a variety of trees and shrubs in the windbreak planting. This gives a more natural landscape appearance, improves wildlife values for more species, and reduces the chances of disease or insect pest problems.

- Where appropriate, select a site that connects to a larger habitat block such as a river corridor, woodlot, wetland, woody draw, or similar area.

- Consider planting a wildlife food plot or leaving grain fields unplowed. The

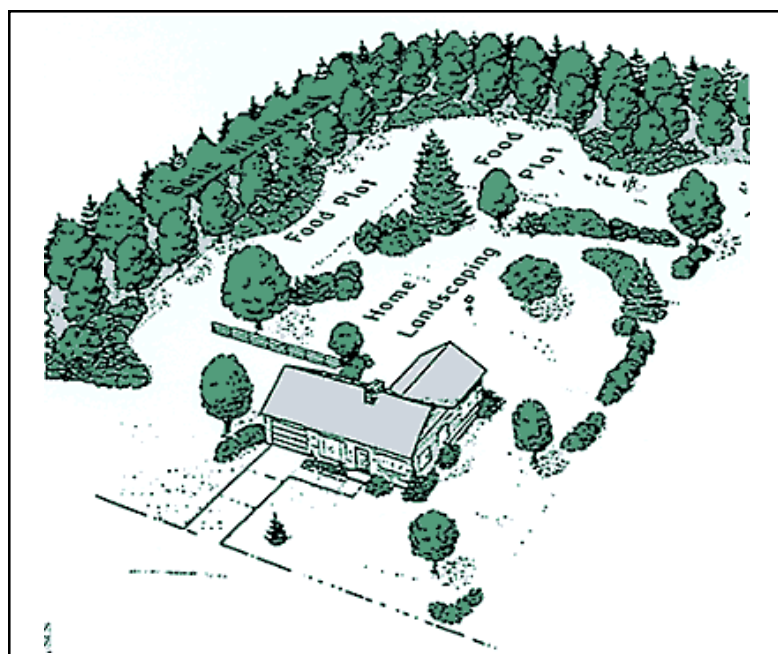
nesting, loafing, and foraging cover for pheasants, quail, meadowlarks, and others. On the windward side, such cover also improves wind protection and shields newly

planted trees from desiccation and abrasion caused by blowing soil. Mowing, if needed, should be late in the season to avoid nesting wildlife

(e.g. August) and limited to every three to four years to maintain standing cover for early nesters.

- Consider adding a row of shrubs to the windward side to trap snow before it gets to the main windbreak and to improve wind protection near the ground.

Field Windbreaks. These windbreaks are often planted across productive cropland to reduce wind erosion, distribute



## Acreage Insights



# Sweet Dreams Little Tractor



For the simplest case where you can get by with putting the tractor to bed for the winter, you can follow the normal winterizing procedures.

They are:

- Run all the gas out or drain the tank.
- Drain the carburetor.
- Remove the plugs and put a few drops of oil in each cylinder then replace the plugs.
- Seal up the distributor or magneto to keep moisture out.
- Place the entire machine on secure and stable blocks to preserve the tires.

- Disconnect the battery cables and place the battery in a safe and temperature controlled storage location.

- Check the coolant with a hydrometer to be sure it can handle any freezing and adjust or replace anti-freeze as indicated.

With these simple procedures, you should be able to bring the tractor back to life in Spring with no damage or adverse affects. To restore it back to functioning condition, you remove the blocking, fill the tank, replace the battery (maybe with a 24-hour trickle charge), and remove anything you have done to seal or cover the machine and components. After allowing time for the carburetor float bowl to fill, it should come to life as easily as it did before you winterized it. This is by far, the best scenario if you don't have need of your tractor for winter chores.

# Space Heater Cautions

As temperatures drop, space heater use will rise. Fuel, carbon monoxide, carbon dioxide, electricity, and heat all create safety concerns and require special precautions when using space heaters.

According to Dave Morgan, safety engineer, NU/IANR, "Fuel-burning space heaters should not be used indoors. If you do operate a heater inside, always install a carbon monoxide detector."

Carbon monoxide, a deadly, odorless, colorless gas is produced whenever a fuel is burned. These heaters also require an adequate supply of combustion air. Oxygen always is consumed when any fuel is burned, and must be replaced.

Space heaters also need extra caution if toddlers and young children are in the house. The outside surfaces are hot. Keep space heaters away from flammable materials. Many space heaters are taller than they are wide, making them easy to tip over. Refueling heaters also is dangerous.

Space heaters should be allowed to cool down before being refilled. Always shut off and cool down any liquid or gas-fueled space heater before fuel containers are replaced or filled. A glowing hot element in the heater will easily ignite liquid fuel or vapors.

Electric space heaters also may be dangerous. A well-designed electric space heater won't allow the electrical element to come in contact with combustible materials, but still keep combustible materials away. Newer units have automatic shut-off features for over temperature and tipping. Old or damaged space heaters may give electrical shocks or cause accidental burns from surfaces that get too hot.

Rather than use a space heater to warm a chilly room, low-cost home improvements really could be the solution. Improve the weather stripping of windows and doors and covering windows with a plastic film is safer and a more cost-effective way to warm a room. (DJ)

and fir are recommended for more northern sites. Stagger the trees in the two rows so that all spaces are better occupied.

- For the middle row (or middle two rows), use tall deciduous trees. A variety of deciduous trees mixed through these rows provides more

benefits to more wildlife species.

- Add a row of tall shrubs and a row of short shrubs on the leeward side. Planting a variety of shrub species with high wildlife values is the best approach. (DJ)