Windbreaks for Livestock operations...Multi-Purpose Tree Plantings

- Windbreaks play an important role in the protection of livestock.
- Properly placed windbreaks can provide benefits to feedlots, livestock pastures, and calving areas.
- Reducing wind speed in winter lowers animal stress, improves animal health, and increases feeding efficiency.





Nebraska

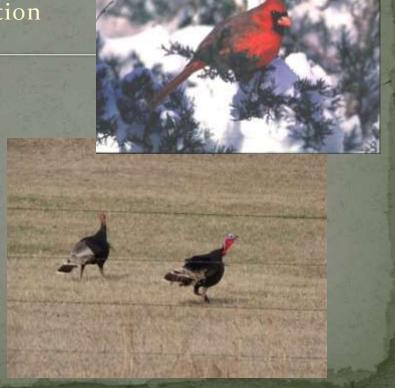
Additional Benefits from Windbreaks Enhance wildlife populations

- . Adds beauty and pleasure to our lives
- . Birds & animals prey on insects, rodents and snakes

Improve working conditions and recreational opportunities

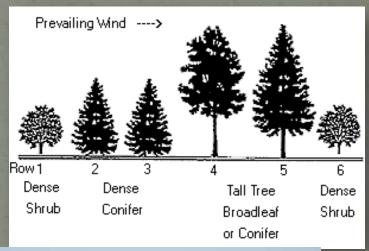
. Birdwatching, photography, hiking, camping & hunting Energy conservation & control snow deposition Visual screening and dust control





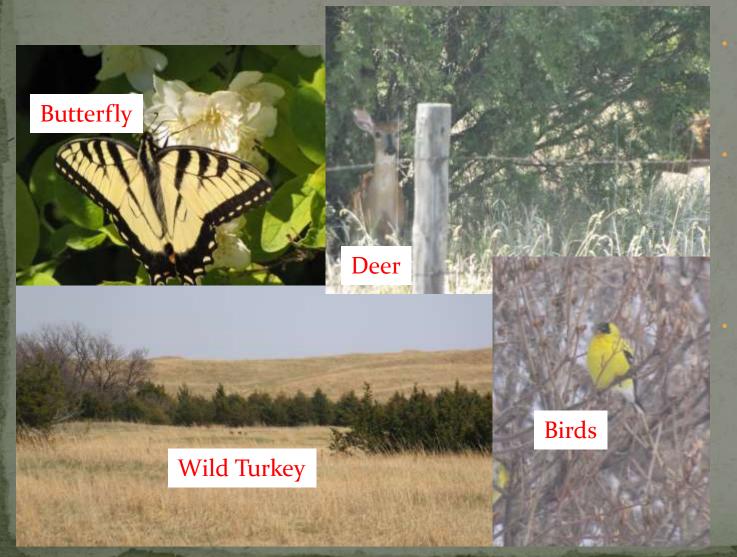
How many rows in a windbreak...

- The typical windbreak has several components:
 - Dense conifer trees to reduce wind velocity
 - Tall broadleaf or conifer trees to extend the area of protection
 - Low shrubs to trip snow, provide wildlife habitat and/or provide aesthetic value





Potential Types of Wildlife



Birds eat insects, fruit and seeds

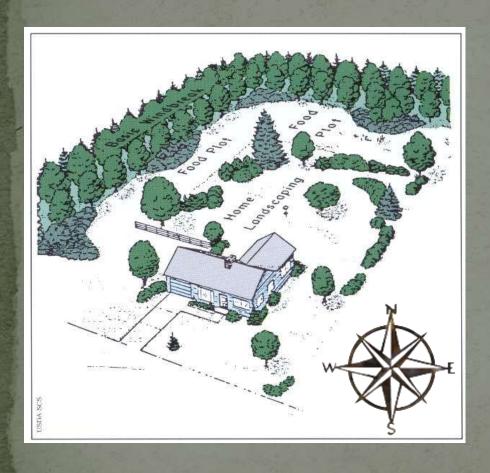
Deer and mammals browse, eat acorns, nuts and seeds

Butterflies, bees and hummingbirds feed on nectar and pollen

Planning Considerations

- Determine trees and shrubs suitable for your site
- Select trees and shrubs beneficial to wildlife (Best Suited for Wildlife)
- Build species diversity into your plan
- Connect to other habitat such as a water source, crop or other cover
- May include a food plot on the downwind side or in between rows with a wide space
- Leave a strip of herbaceous vegetation or grass mix and legumes, grains, and stubble
- Set up a trip row of shrubs on the windward side to pull out extra snow ahead of your wildlife shelter
 - Nebraska Conservation Trees at: nrdtrees.org for reference
 - Contact a forester or other natural resource professional for assistance

Design



- Shrub trip row on the upwind side
- Adapted conifer and hardwood mix – windbreak core
- Shrub blocks on the downwind side
- Follow up management to maintain forest health and access by wildlife

Additional Thoughts For Design

.Windbreaks can provide both shelter and food

.Quality of the protection relates to the wildlife species involved, severity of the weather, age, size, density, orientation, location, composition of the vegetation, and food availability in or near the shelter

.Windbreaks may be used to provide connectivity or travel lanes between areas of habitat (ex. food and water)





WINDBREAK RENOVATION

- Opportunity to modify an existing windbreak
- Loss of trees due to environmental conditions
- Operational changes
- New programs or information
- Supplement an existing planting for wildlife enhancement



Forest Stand Improvement

- Thin (remove) existing trees or tree rows to improve forest health and provide opportunities for diversity
- Keep some older dead and dying individuals or snags for cavity nesters







QUESTIONS/COMMENTS

Resource Material at Nebraska Forest Service Website: nfs.unl.edu



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