Of Buffers and Birds

From Act 167 to Act 162
a how to guide to creating, maintaining and augmenting riparian buffers.

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Riparian Buffer?

Benefits of Buffers to Us

- Pollution Control
- Flood Mitigation
  - Intercepts rainfall
  - Remediates runoff
  - Sediment, nutrient and bacteria removal
  - Temperature moderation

Benefits of Buffers to Us

- Quality of Life
  - Aesthetic Beauty
  - Stress relief
  - Solitude
  - Recreational opportunities

Benefits of Buffers to others

- Wildlife Habitats
  - Migration Corridors
  - Breeding Sites
  - Wintering Sites
  - Critically important for certain species

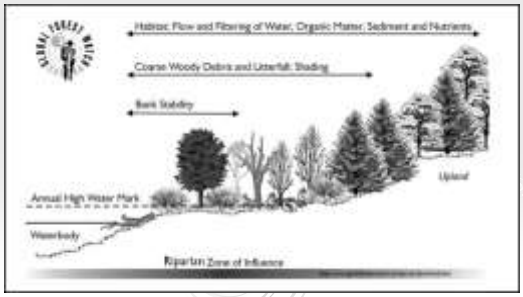
How to Create a Forest Buffer

- Considerations

Diversity/Purpose
- Water Quality
- Wildlife Value

Proximity to stream
- soils
- hydrology
- slope

How to Create a Forest Buffer



Design and Installation Issues

- Selection of plants
  - Proximity
  - Soil hydrology
- Number of plants
  - Area
  - Spacing
- Maintenance
  - Inspection
  - Replacement

Native Woody Plants

- Promotes local ecosystem function
- Maintains natural food webs
- Inhibit spread of invasive species

Close Proximity

- Understory/Shrubs

Spicebush - *Lindera benzoin*
Buttonbush – *Cephalanthus occidentalis*
High-bush Blueberry – *Vaccinium corymbosum*
Swamp Azalea – *Rhododendron viscosum*
Swamp Rose – *Rosa palustris*
Sweet Pepperbush – *Clethra alnifolia*
Sandbar Willow – *Salix exigua*
Red Chokeberry – *Photinia arbutifolia*
Red-osier Dogwood – *Cornus sericea*
Smooth alder – *Alnus serrulata*
Blackhaw – *Viburnum prunifolium*

Close Proximity

- Canopy Trees

Eastern Hemlock – *Tsuga candensis*
Sycamore – *Platanus occidentalis*
River birch – *Betula nigra*
Yellow Birch – *B. alleghaniensis*
Silver Maple – *Acer saccharinum*
Swamp White Oak – *Quercus bicolor*
Pin Oak – *Q. palustris*
Black Willow – *Salix nigra*

Outer Zone

- Understory/Shrubs

Mountain Laurel –*Kalmia latifolia*
Shadbush – *Amelanchier canadensis*
Flowering Dogwood – *Cornus florida*
American Hazelnut – *Corylus americana*
Black Chokeberry – *Photinia melanocarpa*
Rhododendron – *Rhododendron maximum*
Ninebark – *Physocarpus opulifolius*
Winterberry – *Ilex verticillata*

Outer Zone

- Canopy Trees

Red Oak – *Quercus rubra*
White Oak – *Q. alba*
Black Gum – *Nyssa sylvatica*
Sugar Maple – *Acer saccharum*
Black Cherry – *Prunus serotina*
Sassafras – *Sassafras albidum*
Black Birch – *Betula lenta*
Tulip Tree – *Liriodendron tulipifera*
Shagbark Hickory – *Carya ovata*
Basswood – *Tilia americana*

Buffers Benefit Us All