What are the major pests targeted by apple IPM?

Weeds and Wildlife

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Groups of Weeds in Orchards

• Annuals
  • Grasses
  • Broadleaves

• Perennials
  • Grasses
  • Broadleaves
  • Woody plants and vines
  • Nutsedge

Scout, make a weed map, and list the weeds in your orchards.
Weeds by Life Cycle - Annuals

- Spread mostly by seeds, survive in the seed bank...
  - Summer, ex) pigweed, ragweed, crabgrass
  - Winter, ex) mustards, chickweed, henbit
  - Biennial, ex wild carrot, horseweed (marestail)

Photos by Dr. John Meade, Weed Scientist Emeritus
Weeds by Life Cycle - Perennials

- Spread by seeds and vegetatively
  - Simple, ex) dandelion, curly dock, Canada thistle
  - Creeping, ex) quackgrass, nutsedge, bindweed, clover
  - Woody, ex) poison ivy, wild grapevine, sumac

Photos by Dr. John Meade, Weed Scientist Emeritus
A high density orchard planted with grass in the row middles.

- Fescues establish quickly, don’t invade the row, don’t compete with the trees, and provide good traction.

- Within the row, keep weeds under control to prevent competition with the tree during the months of May, June and July.

Photo courtesy of Steve Hoying.
Major Wildlife Pests of Apples

**Deer**

- Browse on young trees, new growth, young branches
- Stunting growth and directly damaging tree

Photo courtesy of Paul Curtis.
Major Wildlife Pests of Apples

Voles: meadow vole & pine vole

• Girdle young trees and are active year-round.
• Promoted by thick and weedy orchard floor.

Photo courtesy of Paul Curtis.
Major Wildlife Pests of Apples

Cottontail Rabbits

• Will girdle trees and limbs and will eat small branches.
• Damage may be above winter snow cover.

Photo courtesy of Paul Curtis.
Major Wildlife Pests of Apples

Woodchucks

- Create burrows in the orchard that can pose a hazard to workers and equipment.
- Burrows close to trees can affect tree health.

Photo courtesy of Paul Curtis.