

## Apple IPM Intensive Workshop

## What are the major pests targeted by apple IPM? Weeds and Wildlife

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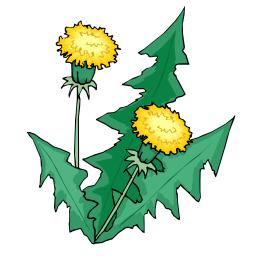




#### Groups of Weeds in Orchards

- 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 Photos by Da John Mood Scientist Engages

Photos by Dr. John Meade, Weed Scientist Emeritus



- 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)

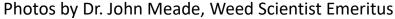








## Weeds by Life Cycle - Perennials Photos by Dr. John Moods Wood Scientist Emeritys





- 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



















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.

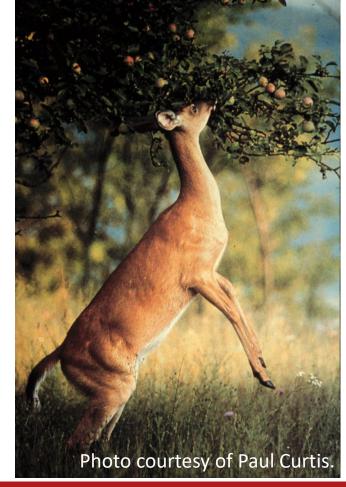






#### Deer

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









#### 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.







#### **Cottontail Rabbits**

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









#### 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.

