



INVASIVE SPECIES

EQCC Briefing

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Introduction to Invasive Plants

1950's Government agencies began to import invasive plants for various reasons including erosion control. It was not until the late 1980's that the terrible effects on the natural areas were noticed.

Invasive Species

- Seemingly harmless plants such as kudzu and Amur bush honeysuckle were only beginning a silent biological invasion of our natural areas.
- Today at least 4,500 species of foreign plants and animals have established populations in the U.S. affecting our industries, Agriculture, Recreation and Wildlife.

Executive Order 13112

- In February of 1999, Executive Order 13112 was signed by President Clinton.
- This order decreed that Federal agencies become responsible for the invasive plants on their properties. From this order the National Invasive Species Management Plan was established.

Aquatic

Invasive Plant

- Noxious weed
- Non-native plant
- Exotic plant
- Invasive pest plant
- Alien plant species



Terrestrial



Bamboo

Characteristics of Exotic Pests

- Prolific seed generation
- Takes advantage of human/natural disturbances
- Lack of natural enemies
- Fast growing
- Produce plant growth inhibitors
- Tolerant to all climates
- Seeds can remain viable up to 10 years



Review

Why are there Invasive Plants?

- Lack of Education
- Wildlife Enhancement Projects
- Inadequate Point of Entry Inspection
- Erosion Control/Soil Conservation
- Lack of Natural Enemies
- Landscaping
- Agriculture
- Dispersal Mechanisms

Invasive Plants Found at Fort Detrick

- The following pages contain descriptions and pictures of plants identified during surveys in 2003

Tree of Heaven

- Native of China
 - Introduced in late 1700's
 - Exudes a foul odor when crushed
 - Can grow 8 feet in the 1st year
 - Allelopathic







Phragmites

- Comes from the Greek word phragma or fence
- Accumulation of dead leaves and stems prohibit desirable plant growth









Privet

- Native of Europe, North Africa & Asia
 - Cultivated since ancient times







Bush Honeysuckle

- Native of Asia & Western Europe
 - Fruit contains 2-6 viable seeds
 - Wildlife enhancement & ornamental
 - Allelopathic







Japanese Honeysuckle

- Native of Nagasaki area of Japan
 - Found on forest edges & fence rows
 - Creeping vine & fragrant flowers
 - May girdle or “over-top” vegetation





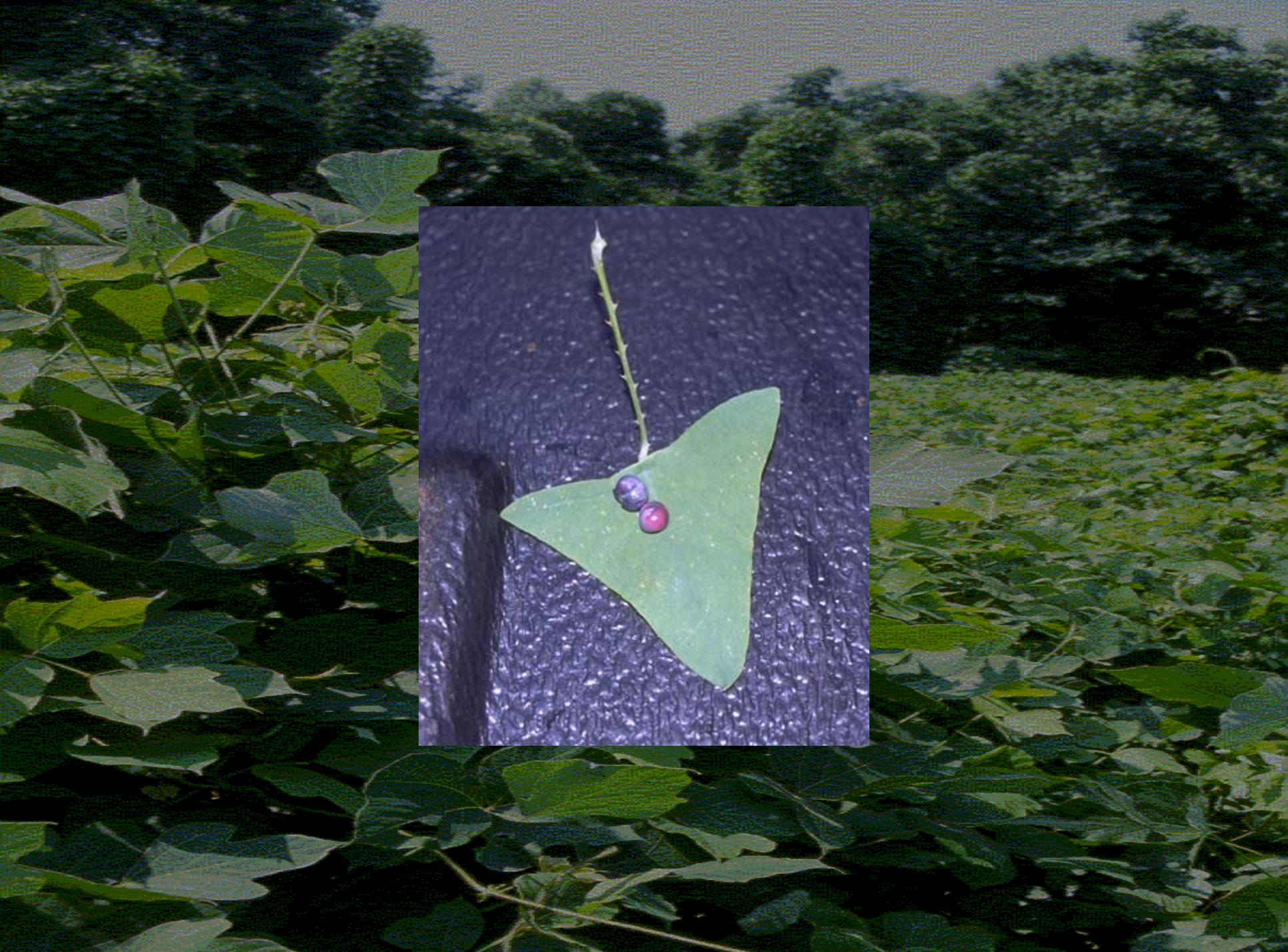


Mile a Minute Vine

- Native to Asia
- Also called Devil's Tail
- Annual
- Overtops Vegetation
- Negative aspects for forestry and Christmas Tree operations







Garlic Mustard

- Introduced from Europe in 1868 as a medicinal herb
 - Garlic odor when crushed and mustard-like in appearance
 - One plant can produce up to 868 seeds
 - Seeds are dispersed via human/animal vectors and by water





Mimosa



Oriental Bittersweet

- Native to Japan, Korea and Northern China
- $\leq 95\%$ seed germination



- Annual growth rate is 1-12ft



Photos Provided by John Randall and...





Vinca

- Native of Southern Europe
 - Planted on burial sites
 - Spreads vegetatively
 - Out competes native flora
 - Landscaping ground cover
 - Forms dense ground mats





English Ivy





Princess Tree

- Native to Western & Central China
 - Wood highly valued in Japan
 - One tree can produce 20 million seeds annually



Others Found at Fort Detrick

- Japanese Spiraea
- Japanese Wineberry
- Crown Vetch
- Canada Thistle
- Musk Thistle
- Japanese Barberry

Beware

- Bamboo
- Burning bush
- Chinaberry
- Lespedeza
- Mimosa
- Vinca major



Goals

- Invasive Species Management Plan was completed December 2000
- Invasive plant control was started in 2001 and is spread out over ten years.
- The next Invasive Species Workshop will be in October 2003.

Contact Information

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