



We put science to work.™

# Wild Pigs in North America

## History, Distribution, Ecology and Challenges

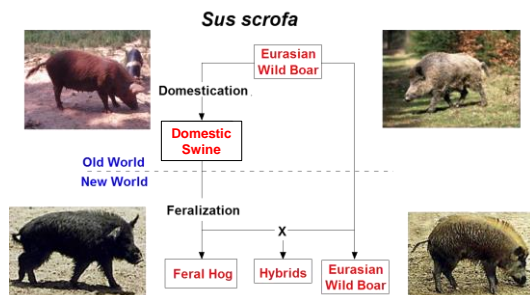
Dr. Jack Mayer

Sept. 9, 2014

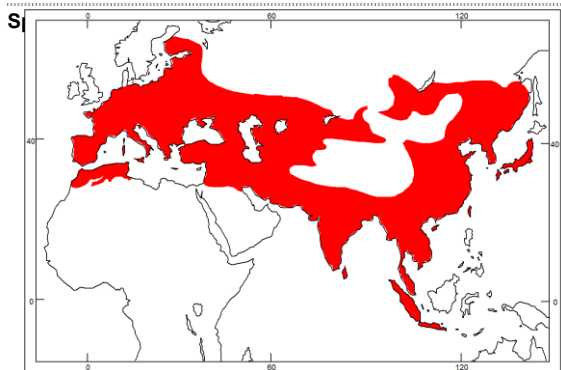


### Wild Pigs in North America

#### Species Phylogeny

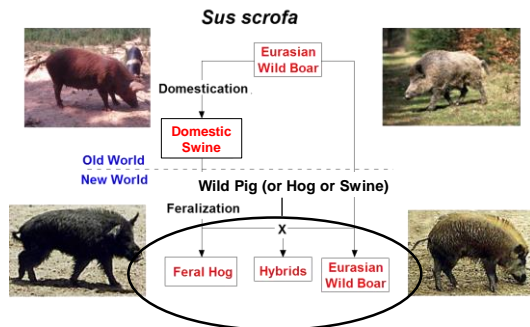


### Wild Pigs in North America



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#### Species Phylogeny



### Wild Pigs in North America

#### History of the Introduction

#### The Early Beginnings of the Present Problem

- First domestic pigs brought to the New World

- Wild pig damage in the 1490s

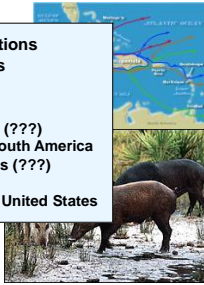
- 1505 Proclamation of the Crown to regulate

- In early 1500s to the main expeditions

- Established feral pig populations present in SE & SW by the mid 1500s

**Early Spanish Expeditions with Herds of Pigs**

- Balboa – 1513/Panama
- Cortéz – 1519/Mexico
- De León – 1521/United States (???)
- Pizarro – 1524/Panama and South America
- De Ayllón – 1526/United States (???)
- De Soto – 1539/United States
- Coronado – 1540/Mexico and United States



### Wild Pigs in North America

#### History of the Introduction

- Domestic pigs with the European coloration to the East and South

- Free-range livestock to widespread feral

- Typically considered property (not wild); era of hunting and trapping

- Only minimal early damage

- Feral pigs were widespread in the U.S. and parts of Mexico by the early 1900s



### Wild Pigs in North America

#### History of the Introduction

- Introductions of pure Eurasian wild boar into North America began in the late 1800s:

- Corbin's Park, NH – 1890
- Litchfield Park, NY – 1902
- Hooper Bald, NC – 1912
- St. Charles Ranch, TX – 1930
- Powderhorn Ranch, TX – 1939
- Edward's Plateau, TX – 1940s

- Most were introductions into fenced enclosures

- Numerous subsequent secondary introductions into other locations



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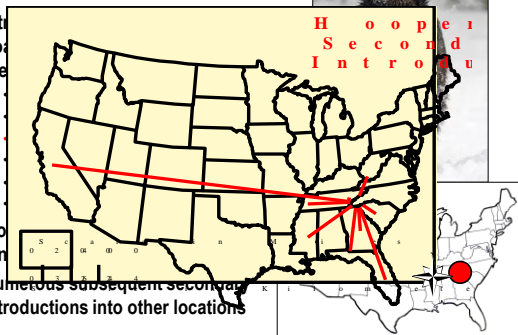
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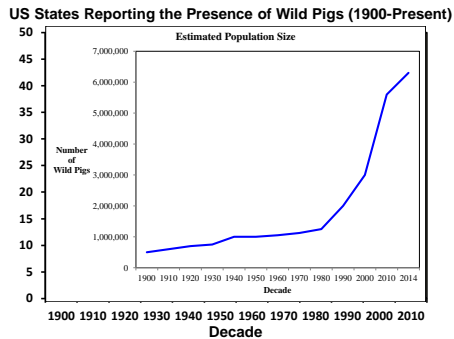
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### Wild Pigs in North America

#### History of the Introduction



### Wild Pigs in North America

#### Second-most Popular Big Game Animal in North America



## Wild Pigs in North America

### History of the Introduction

- **United States**
  - Illegal intra- and inter-state translocations and releases
  - Commercial fenced shooting operations
  - Active stocking of wild pigs and Eurasian wild boar phenotype
    - Various states - 1950s through 1970s
    - Private individuals – 1950s through present
  - Dispersal south from Canadian Prairie Provinces (e.g., into North Dakota)



## Wild Pigs in North America

### History of the Introduction

- **Canada**
  - Small-scale wild boar farm livestock diversification program
  - Commercial fenced shooting operations
- **Mexico**
  - Widespread free-range practices with domestic pigs
  - Active stocking of Eurasian wild boar phenotype
  - Dispersal south from US



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## Wild Pigs in North America

### Current Status

- **United States**
  - Wild pigs established in 36 states
  - Reported presence reported in 11 additional states
  - Never reported in three states (DE, RI and WY)
  - Estimated to number approx. six million animals (est. range of 4 to 11 million)



### Wild Pigs in North America

#### Current Status

- **Canada**
  - Established in four provinces; reported in two others
  - Estimated to number in the thousands of animals
- **Mexico**
  - Documented in ten Mexican states; likely present in others
  - No nationwide population estimate



### Wild Pigs in North America

#### Current Status

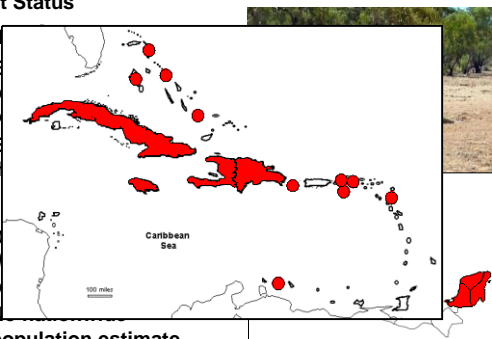
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#### Current Status

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  - **E**
  - **P**
  - **O**
  - **t**
  - **M**
  - **D**
  - **P**
  - **N**
- population estimate

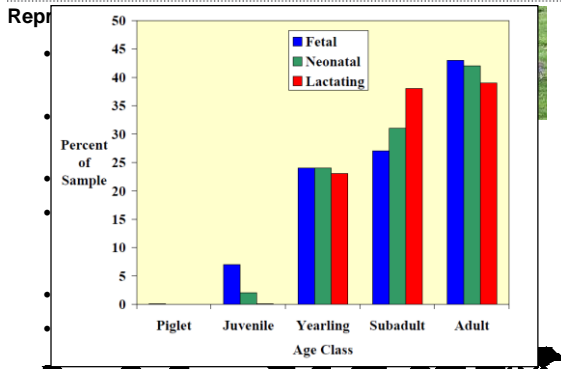


### Wild Pigs in North America

#### Wild Pigs are the Ultimate Survivor

- | Documented Natural/Nonhuman Predators |                         |
|---------------------------------------|-------------------------|
| • American Alligator                  | • Red Fox               |
| • Turkey Vulture                      | • Gray Fox              |
| • Red-tailed Hawk                     | • Black Bear            |
| • Golden Eagle                        | • Small Indian Mongoose |
| • Great Horned Owl                    | • Bobcat                |
| • Feral Dog                           | • Mountain Lion         |
| • Coyote                              | • Wild Pig              |
| • Red Wolf                            |                         |
| Potential Natural/Nonhuman Predators  |                         |
| • Burmese Python                      | • Lynx                  |
| • Gray Wolf                           | • Jaguar                |

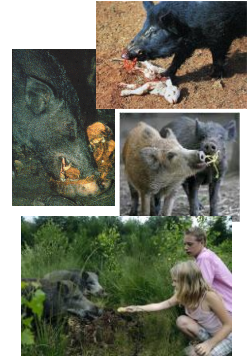
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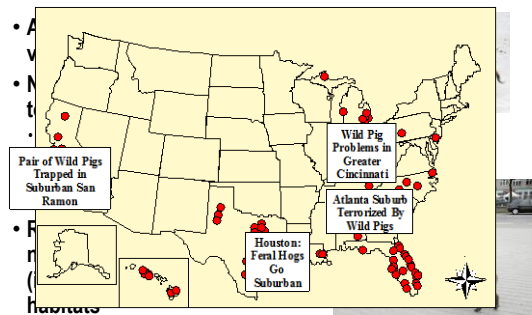
#### Food Habits/Diet

- Wild pigs are classified as opportunistic omnivores
- “If it has a calorie in it, and they can get their mouth around it, wild pigs will eat it”
- Typical composition of diet:
  - 88% plant matter
  - 10% animal matter
  - 2% fungi
  - <1% misc. (e.g., soil, rocks, sticks, garbage)



### Wild Pigs in North America

#### Habitat Requirements



### Wild Pigs in North America

#### Mobility

Wild pigs can:

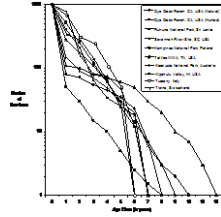
- Run up to 30 mph
- Jump a 3-ft fence
- Swim across 2 miles of open water
- Turn sharp corners while running
- Ascend very steep inclines
- Jump/climb over 5-6' corral trap walls



### Wild Pigs in North America

#### Population Biology

- Equal post-natal sex ratio
- No. of litters/sow/yr. – 0.84 up to 2.0
- High juvenile mortality
- Mean life expectancy – 1.5 yrs.
- Max reported longevity in wild – 14 yrs.
- Density (105 studies)
  - Mode of 4 pigs/mi<sup>2</sup>
  - Reported maximum of 194 pigs/mi<sup>2</sup>
- Mean population growth rate of 18 to 20 percent annually
- 60-70% annual removal needed to reduce a wild pig population over time



### Wild Pigs in North America

#### And that's When the Damage Starts...

- A lot of damage to both the natural and human environments
- Negatives outweigh positives
- One of the worst invasive species on the face of the earth
- Magnitude of damage rivaled by the diversity of damage



### Wild Pigs in North America

#### And that's When the Damage Starts...

- A lot of damage to both the natural and human environments
- Negative positive: **\$1.5 Billion Annually**
- One of the most invasive species on the face of the earth
- Magnitude of damage rivaled by the diversity of damage



### Wild Pigs in North America

#### The Challenge

- Makeup of the animal itself
- Extremely destructive
- Lack of truly viable control options
- Complication of the sport hunting component
- General lack of:
  - Awareness of this problem
  - Legislative support
  - Being on the "same page"

**Things are improving....**





## Wild Pigs in North America

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Questions?



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