

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

2007 Overview of Soybean Rust in
North America
(United States & Canada)

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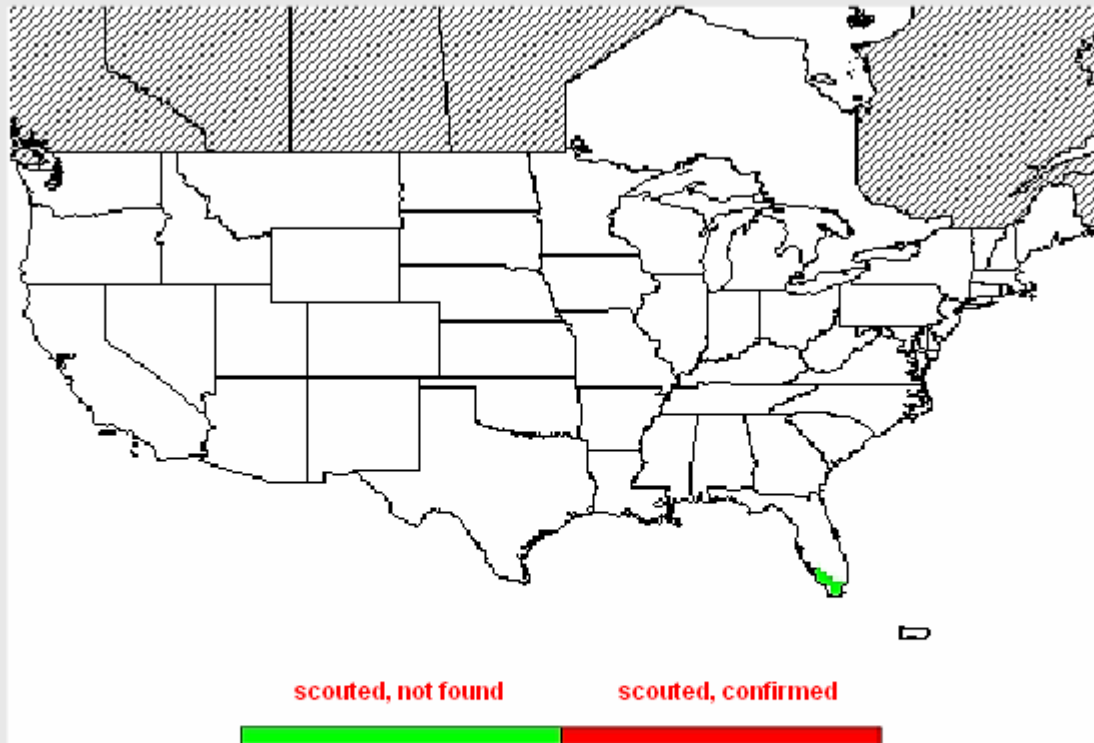
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Outline

- Rust in the U.S. and Canada in 2007
- Comparison of 2005, 2006, and 2007
- Response to rust in 2007 – fungicide applications
- Summary



Soybean Rust in 2007



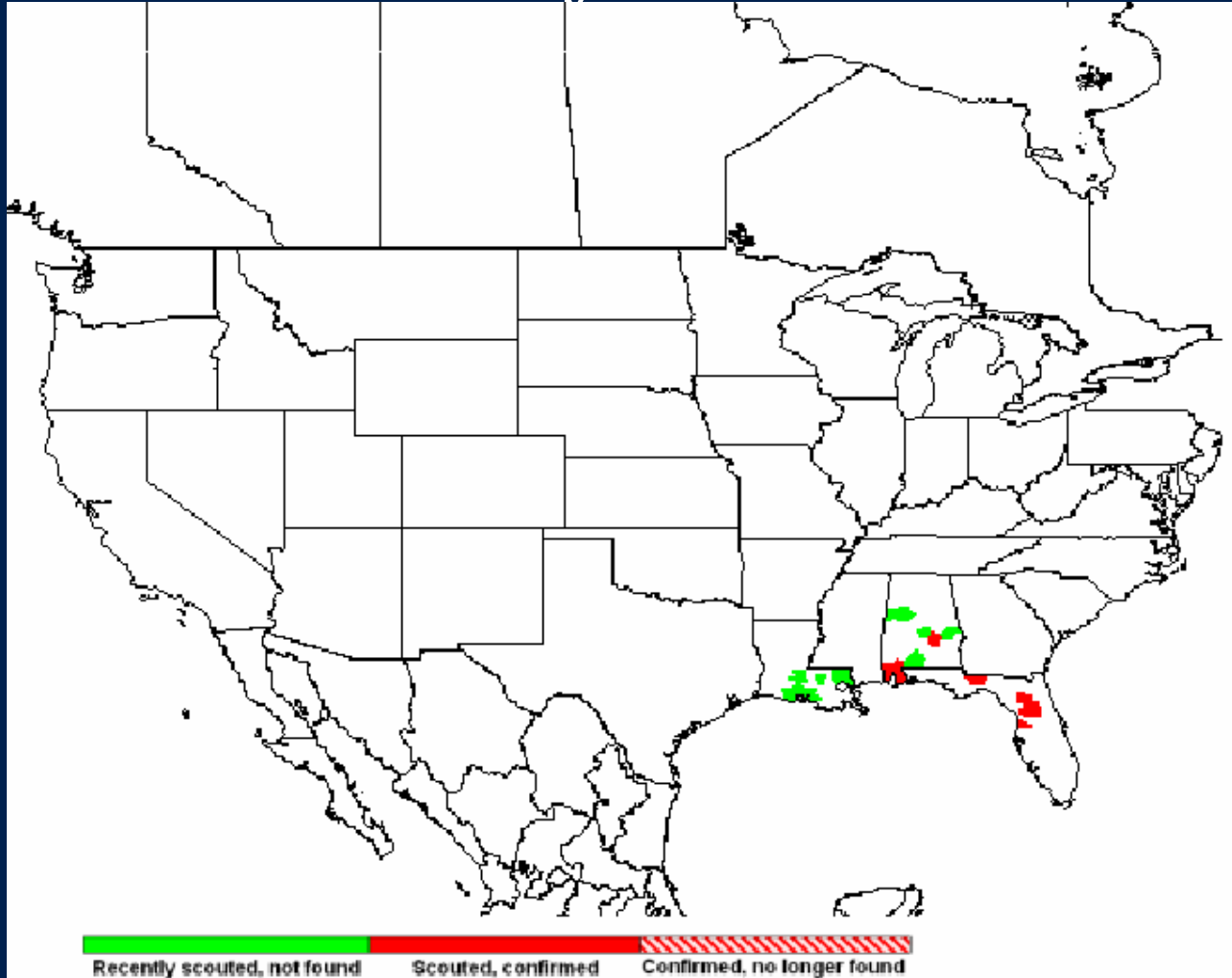
2005 Calendar Start Animation Stop Animation
16 February

Animation constructed by Annalisa Ariatti, Penn State University



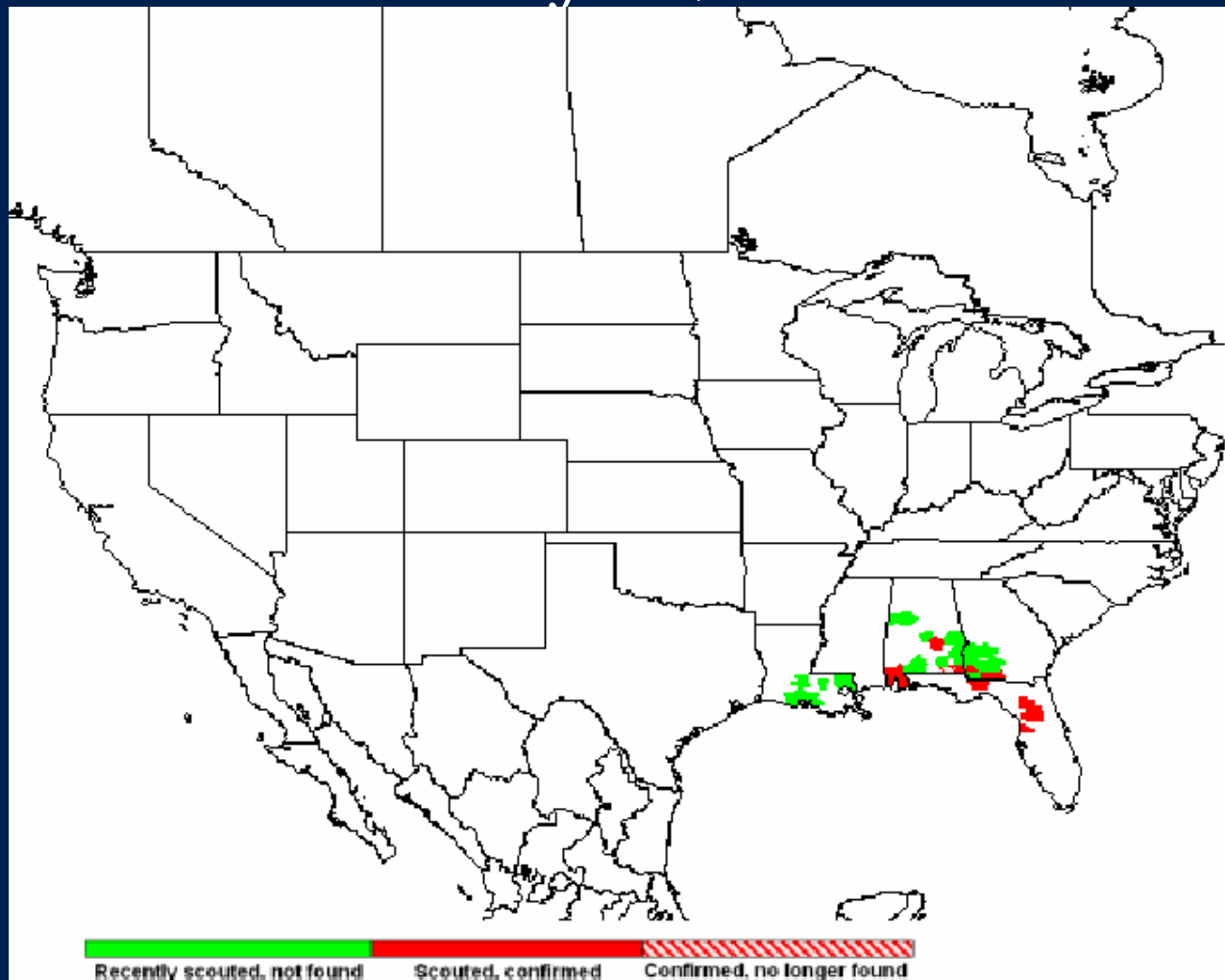
January 9, 2007

Alabama
Florida



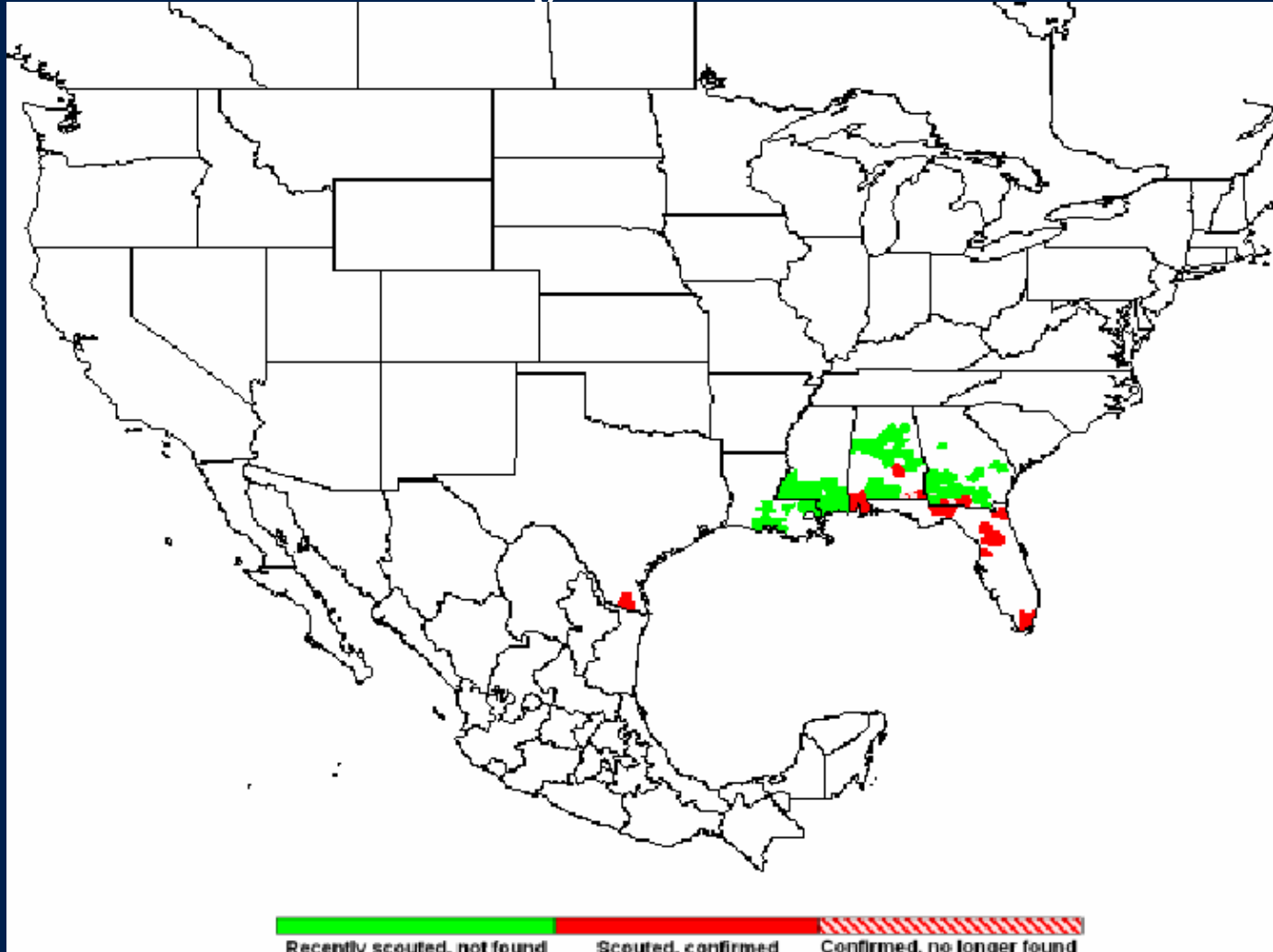
January 16, 2007

Alabama
Florida
Georgia



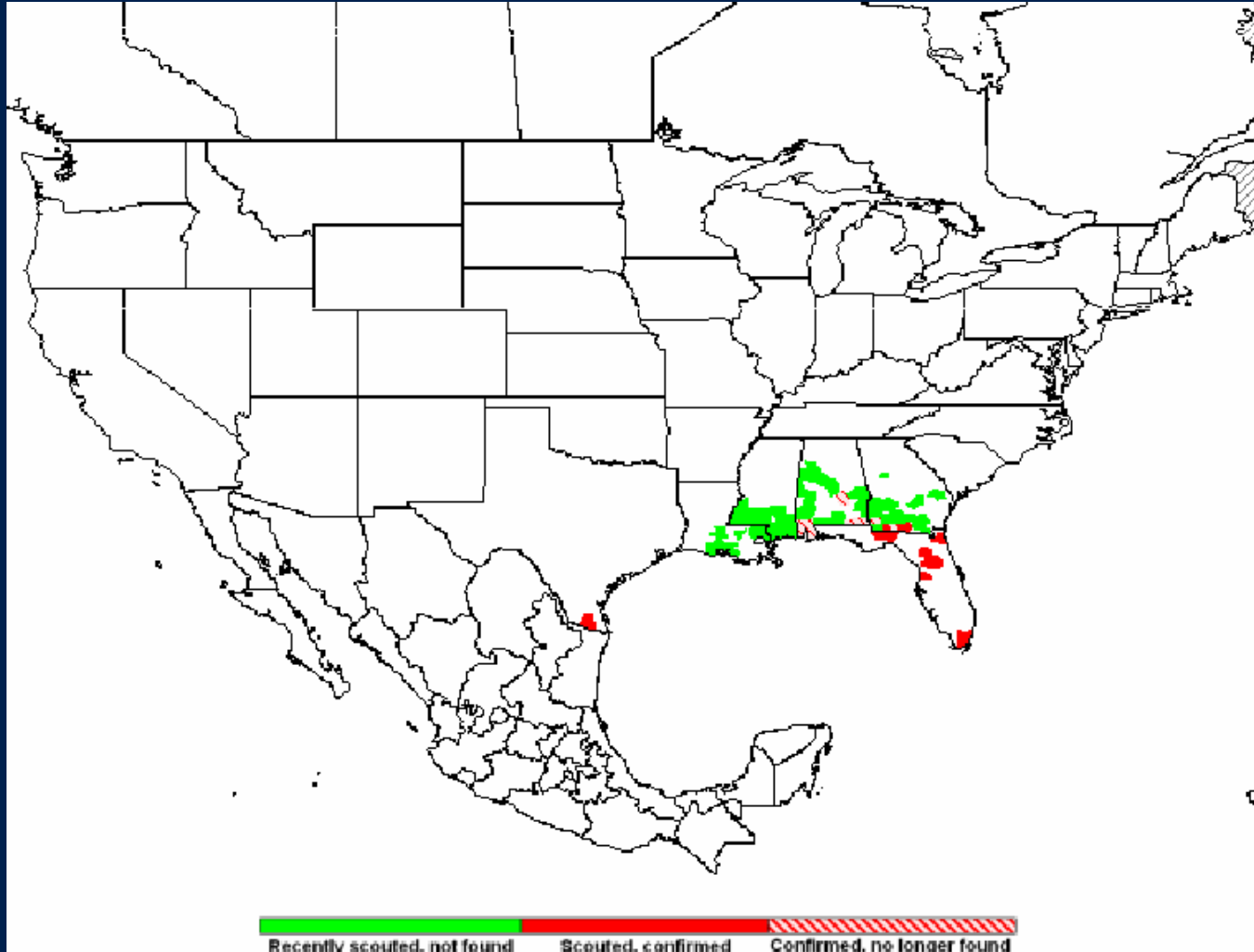
February 20, 2007

- Alabama
- Florida
- Georgia
- Texas

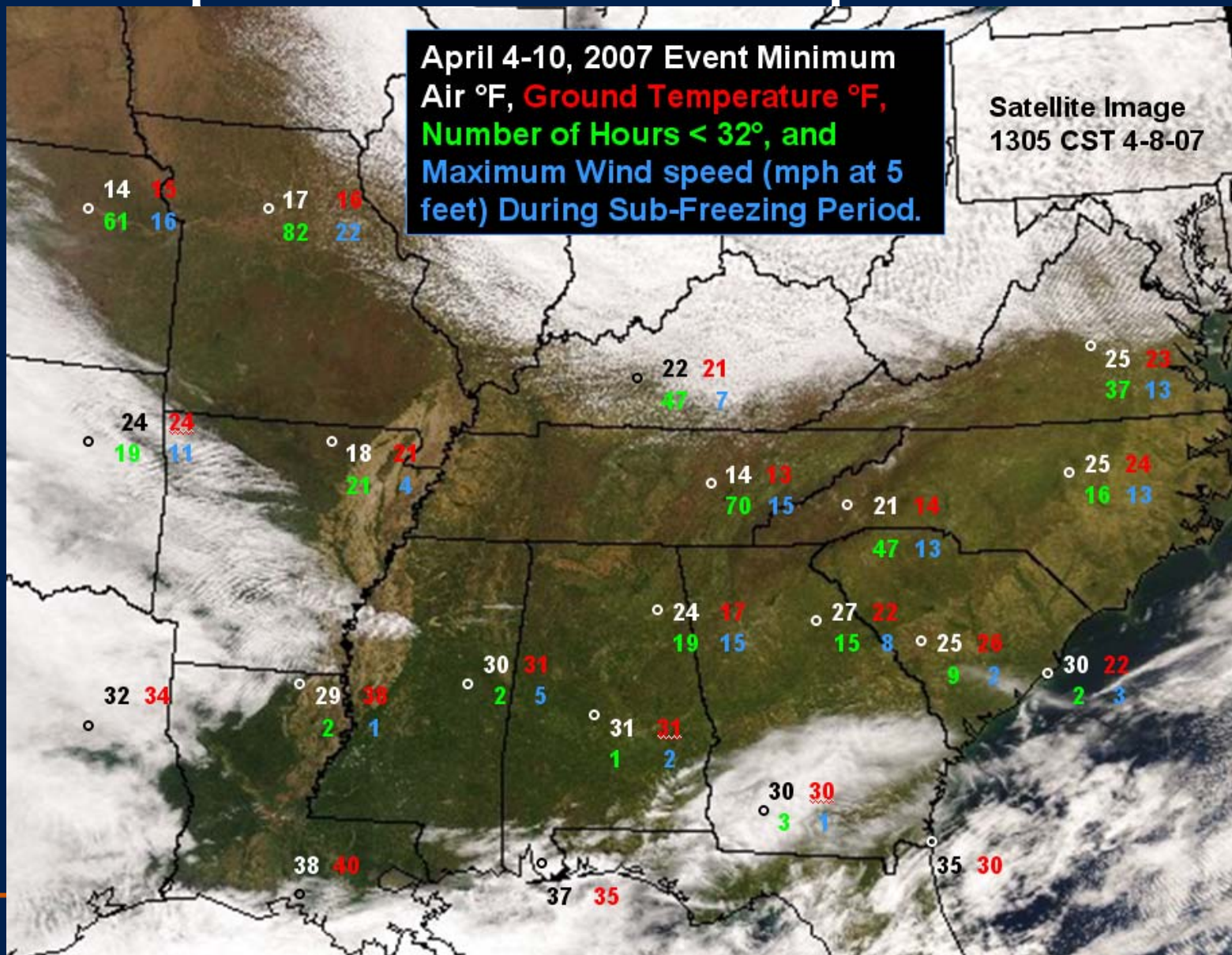


March 6, 2007

- Alabama
- Florida
- Georgia
- Texas

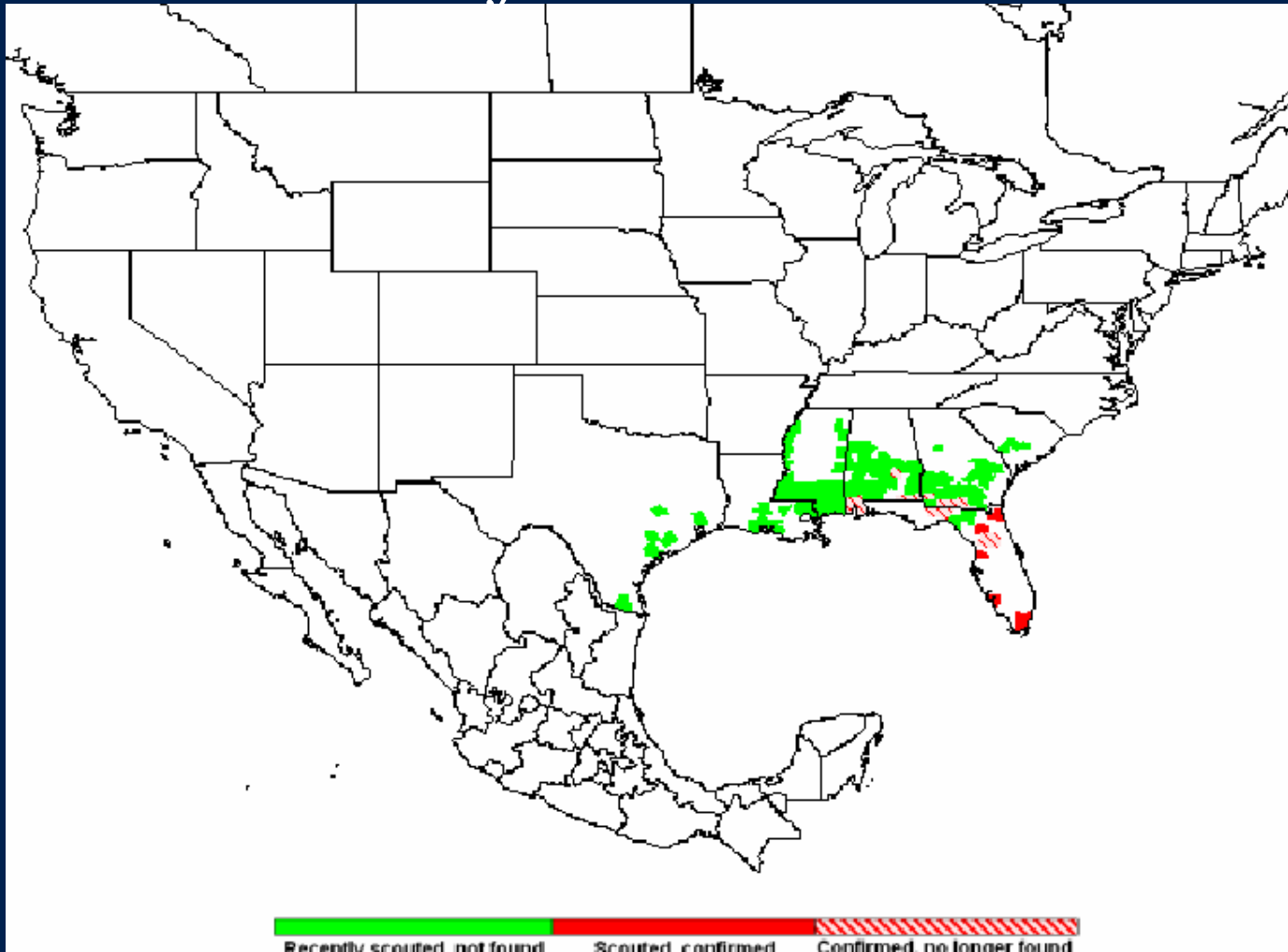


April 2007 – Cold Temperatures



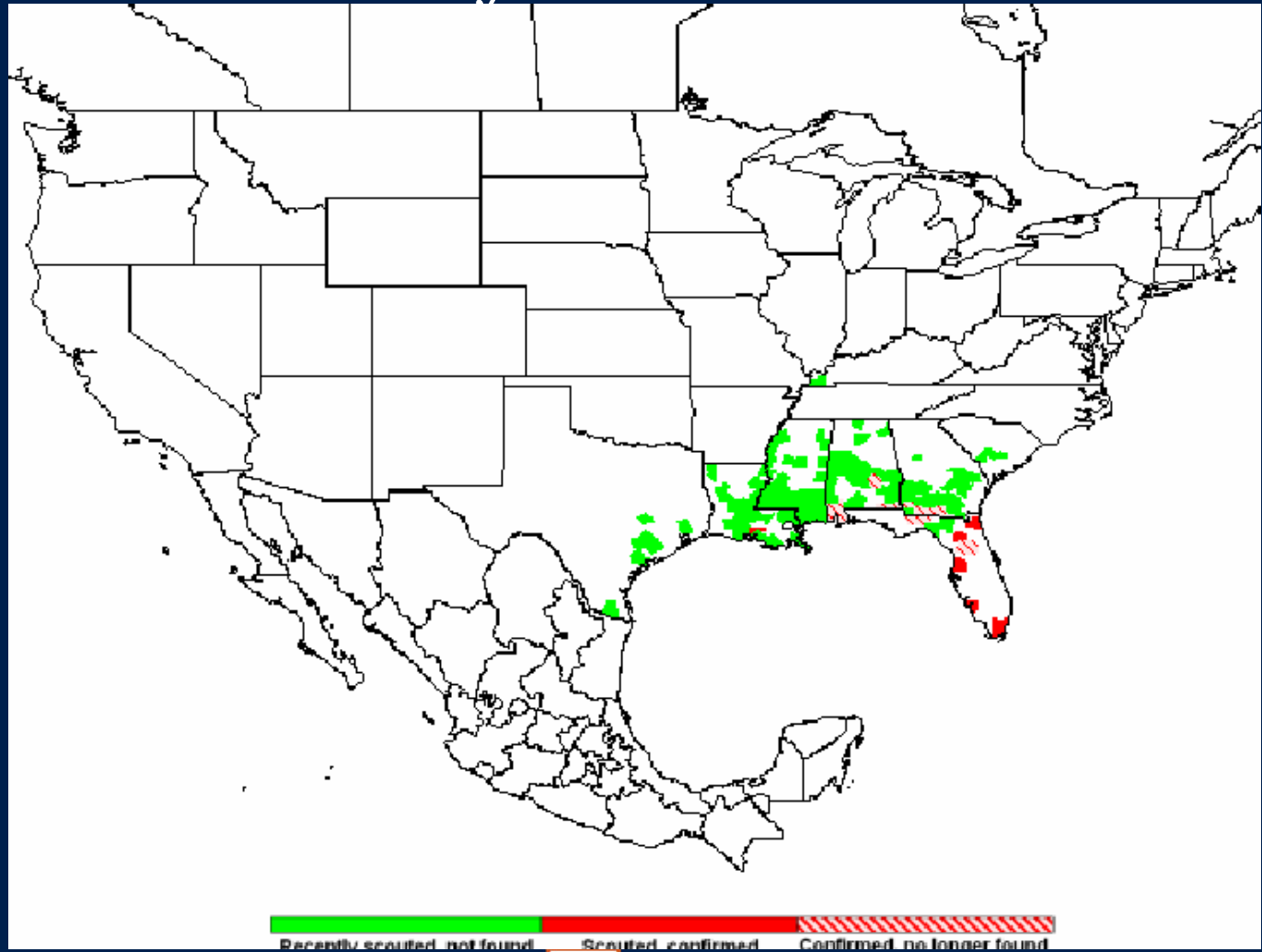
May 1, 2007

- ~~Alabama~~
- ~~Florida~~
- ~~Georgia~~
- ~~Texas~~



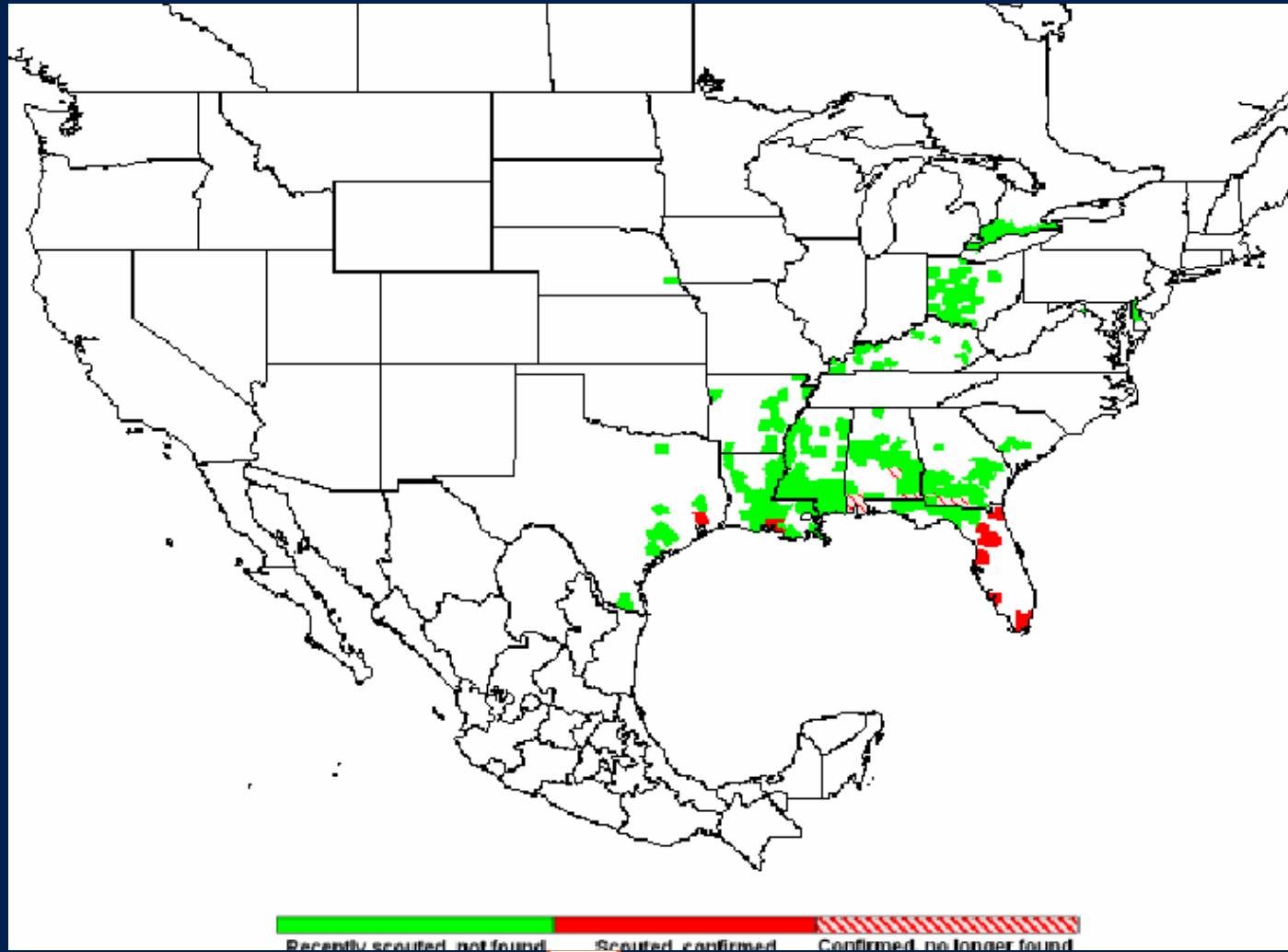
May 8, 2007

- ~~Alabama~~
- ~~Florida~~
- ~~Georgia~~
- ~~Texas~~
- Louisiana



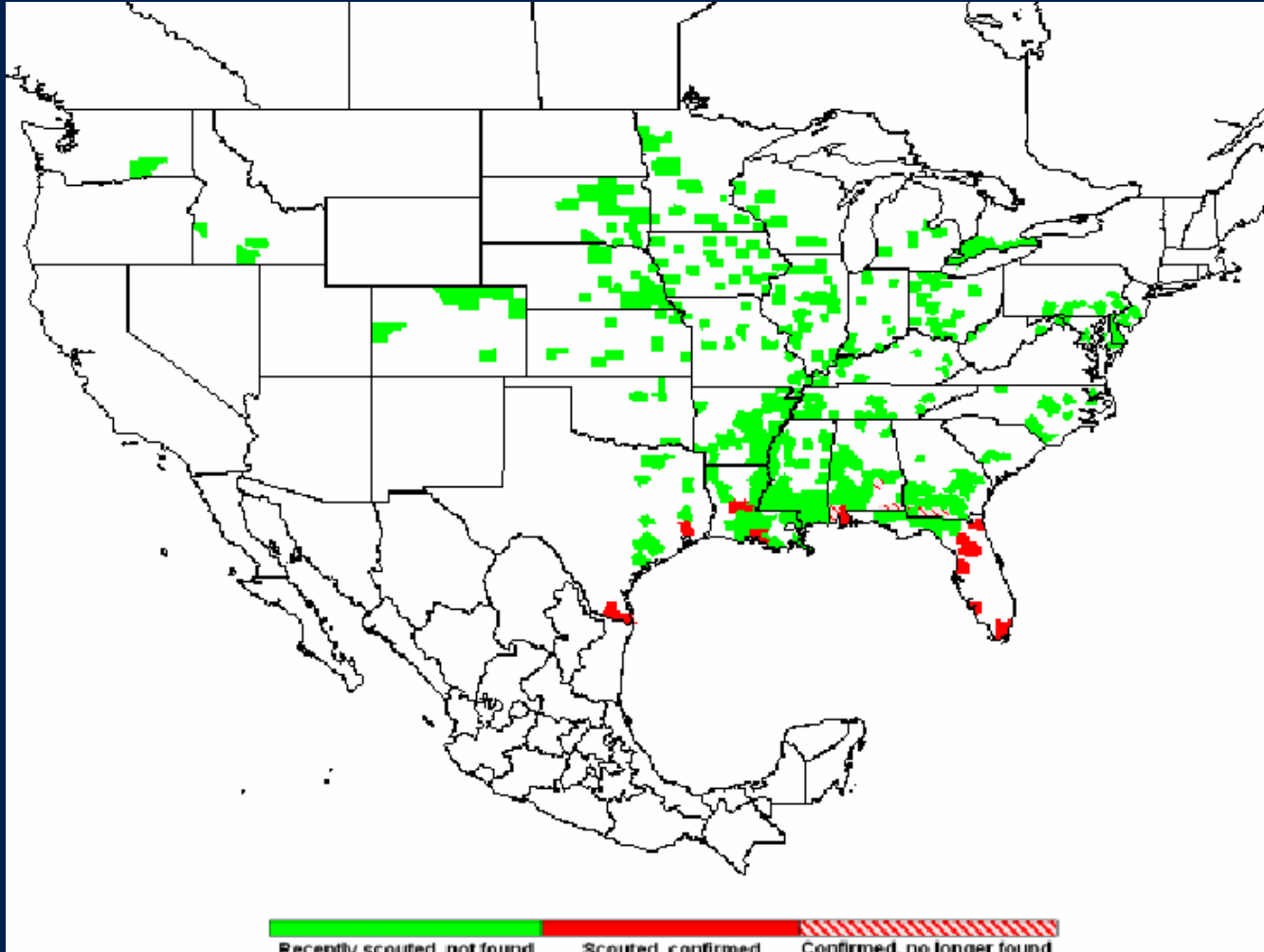
June 5, 2007

- ~~Alabama~~
- ~~Florida~~
- ~~Georgia~~
- Texas
- Louisiana



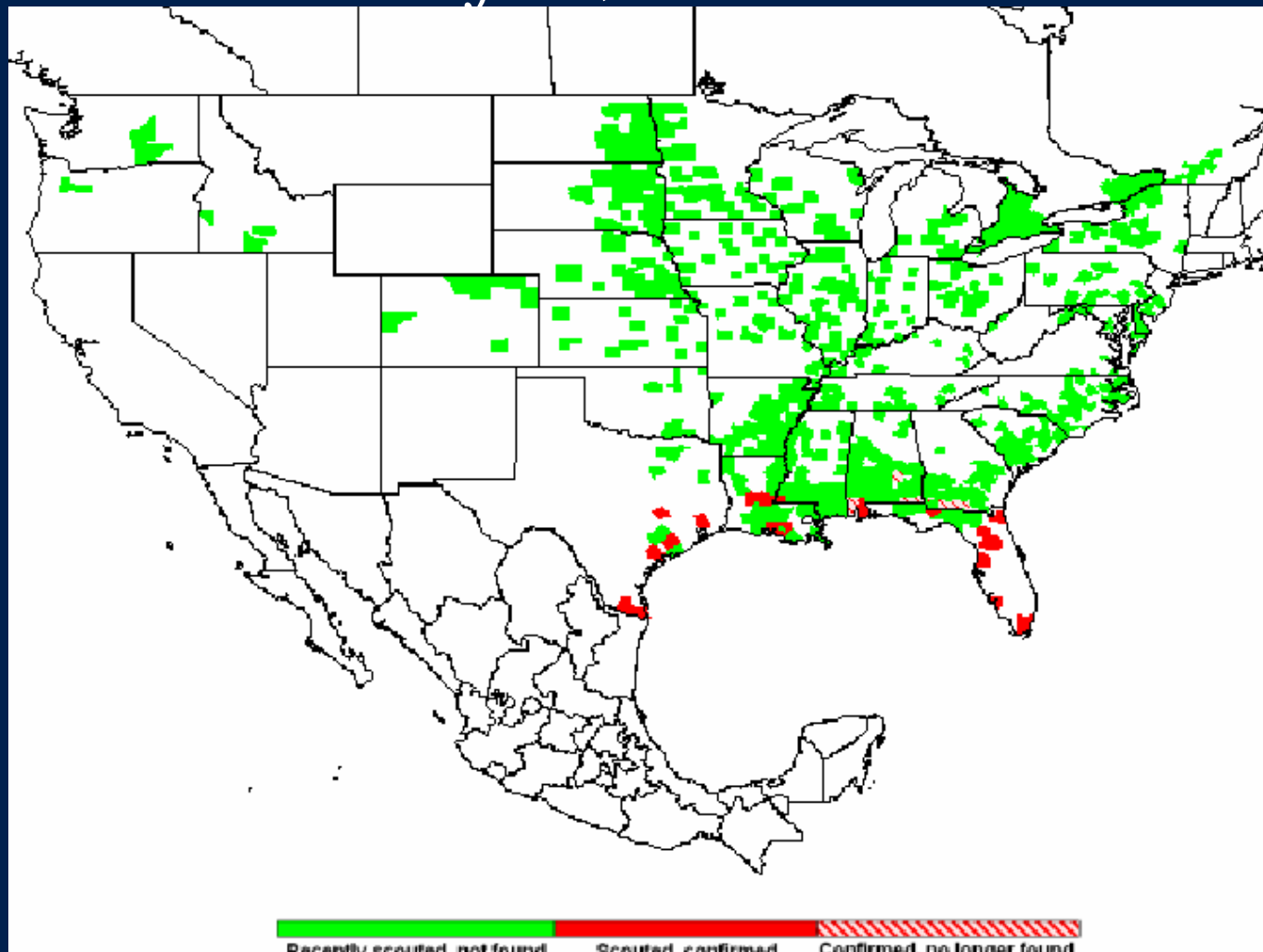
June 27, 2007

- Alabama
- Florida
- ~~Georgia~~
- Texas
- Louisiana



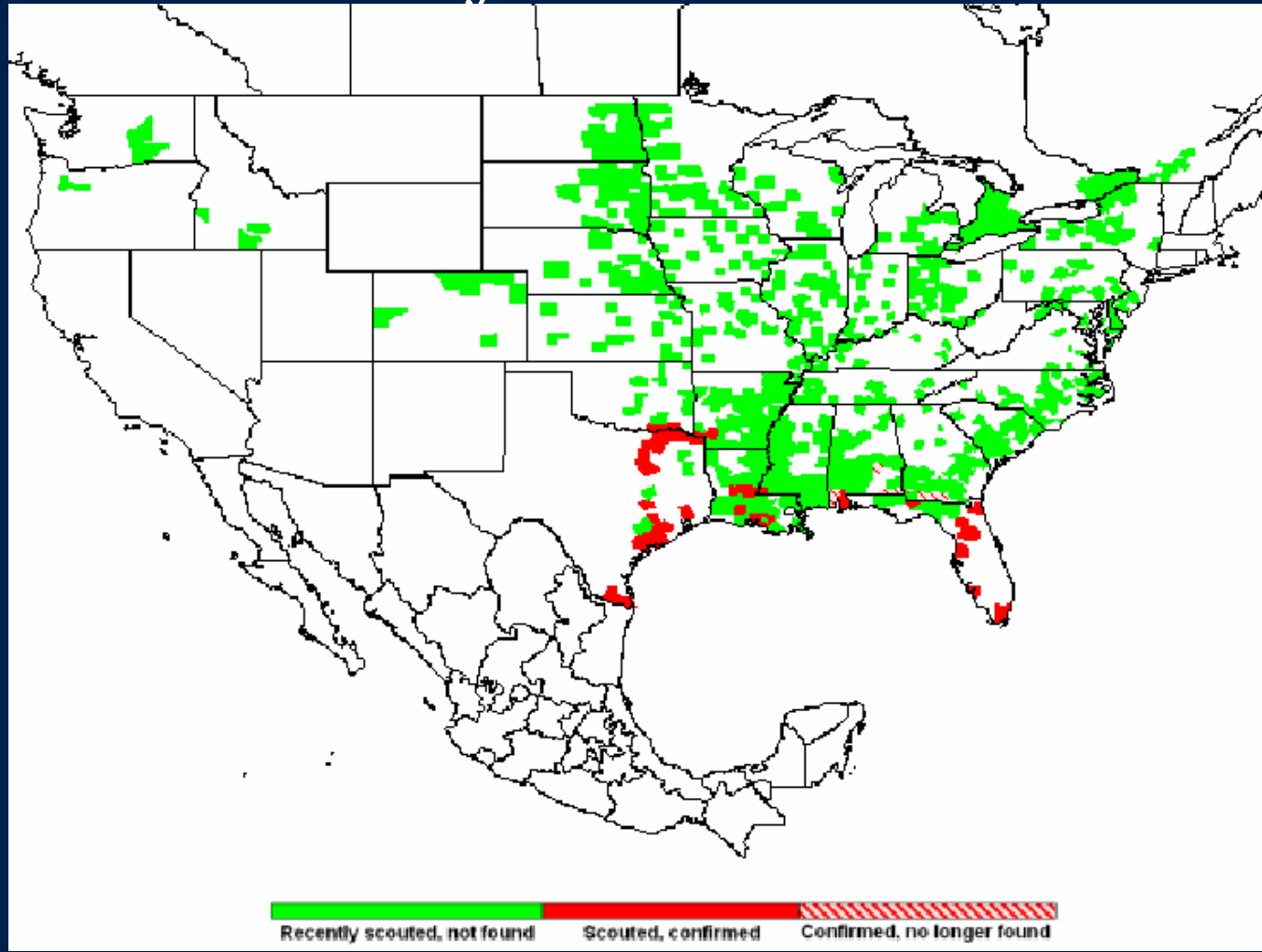
July 17, 2007

- Alabama
- Florida
- ~~Georgia~~
- Texas
- Louisiana
- Mississippi



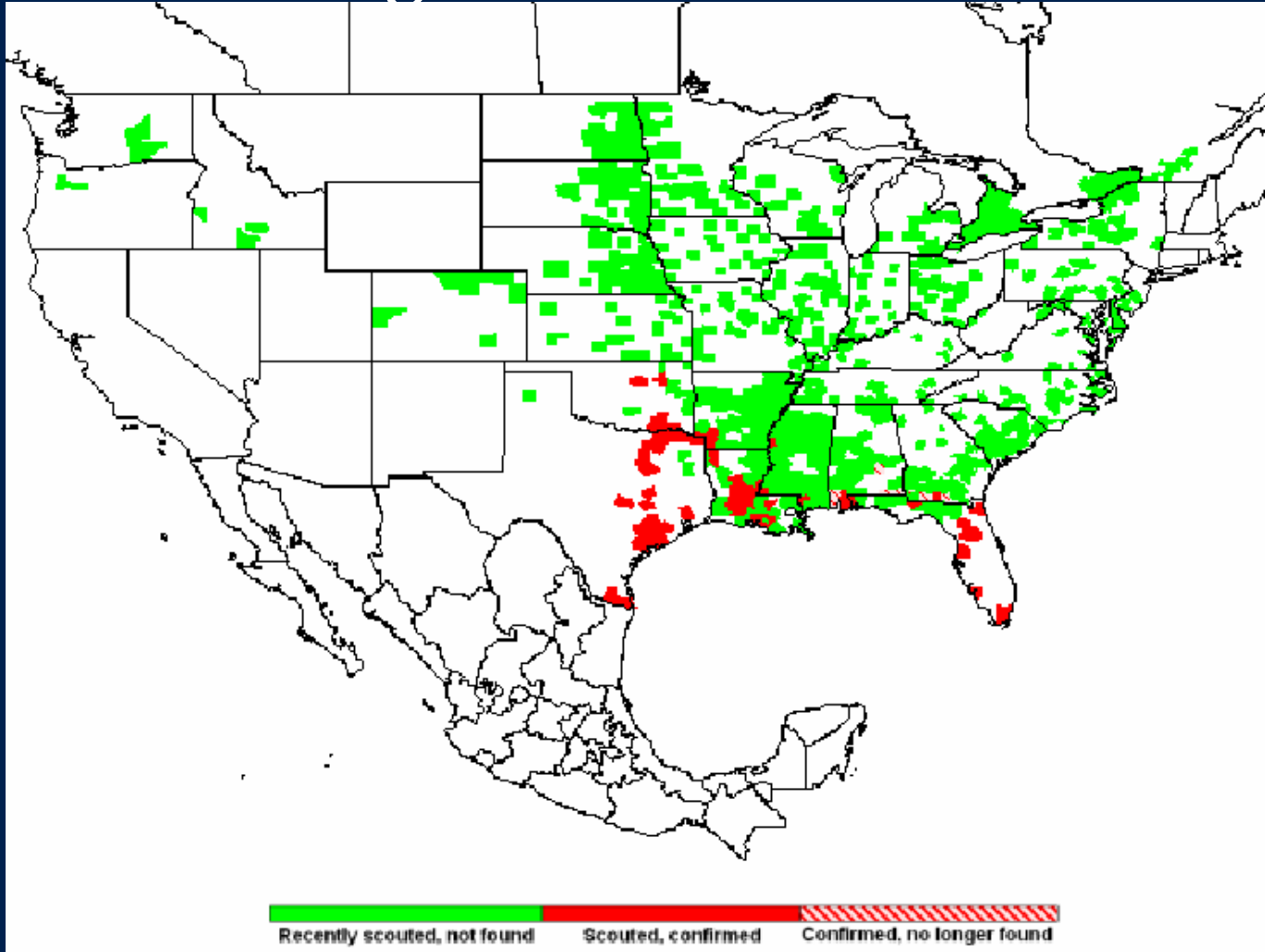
July 31, 2007

- Alabama
- Florida
- ~~Georgia~~
- Texas
- Louisiana
- Mississippi
- Oklahoma
- Arkansas



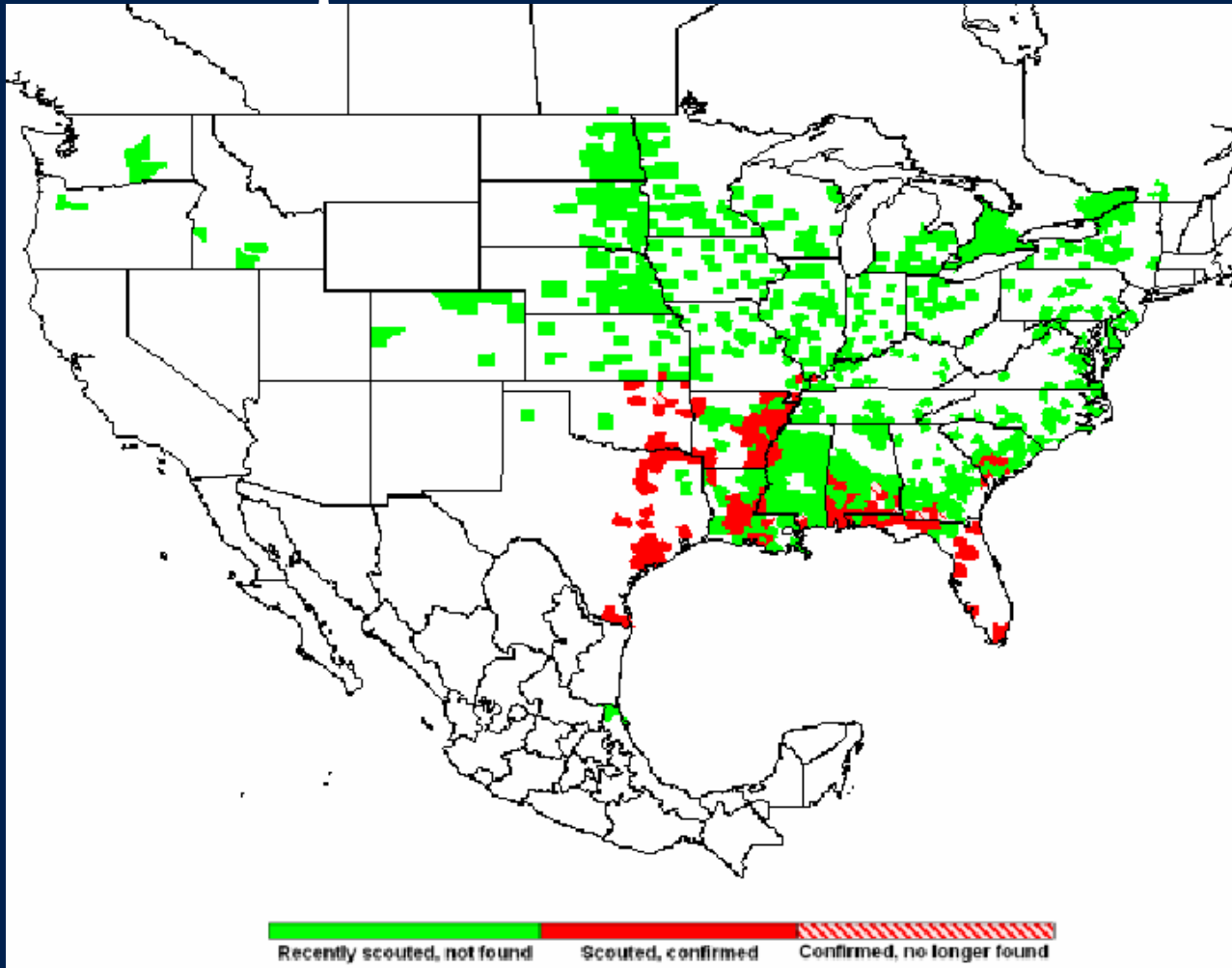
August 14, 2007

- Alabama
- Florida
- Georgia
- Texas
- Louisiana
- Mississippi
- Oklahoma
- Arkansas



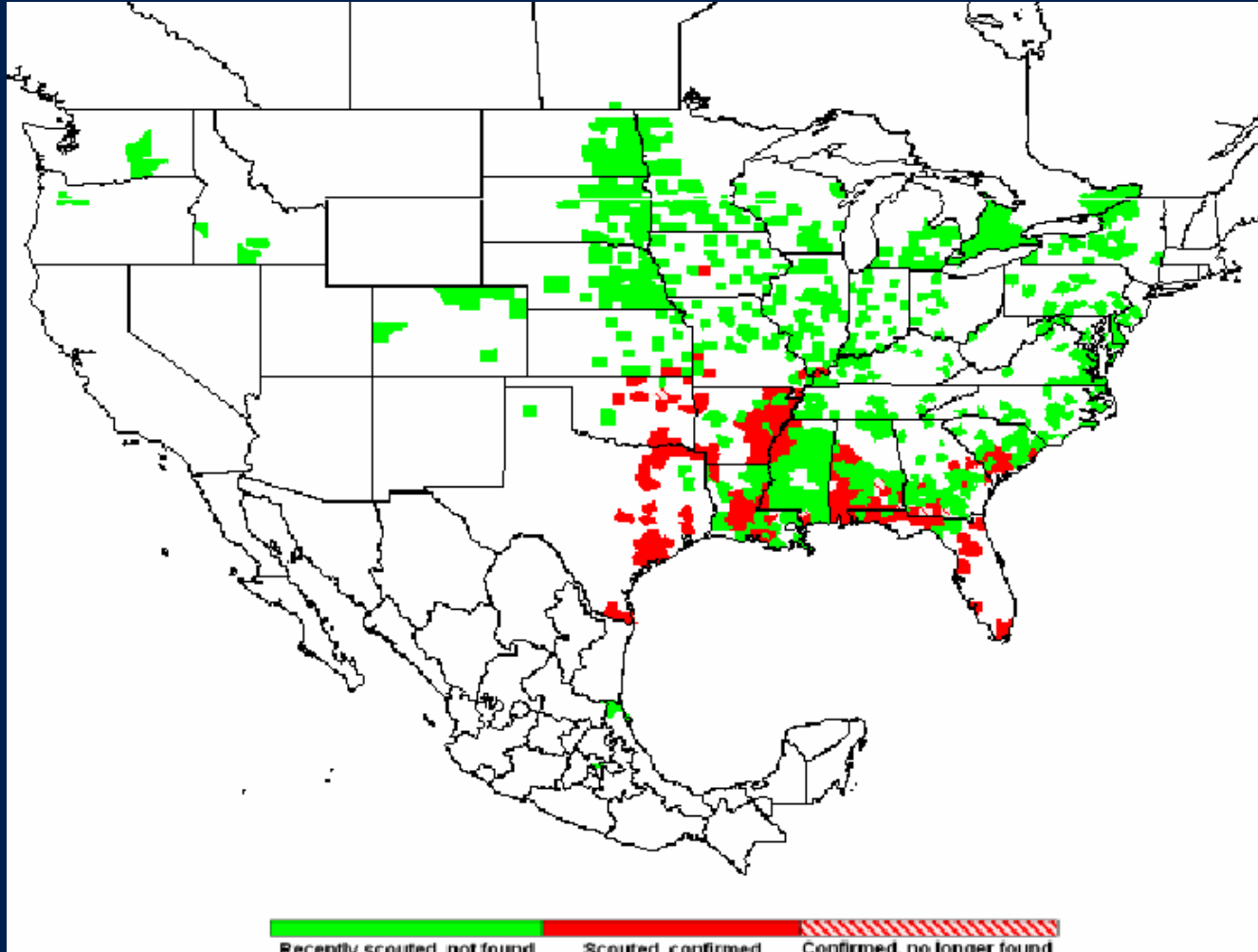
September 25, 2007

- Alabama
- Florida
- Georgia
- Texas
- Louisiana
- Mississippi
- Oklahoma
- Arkansas
- Missouri
- South Carolina
- Kentucky
- Kansas



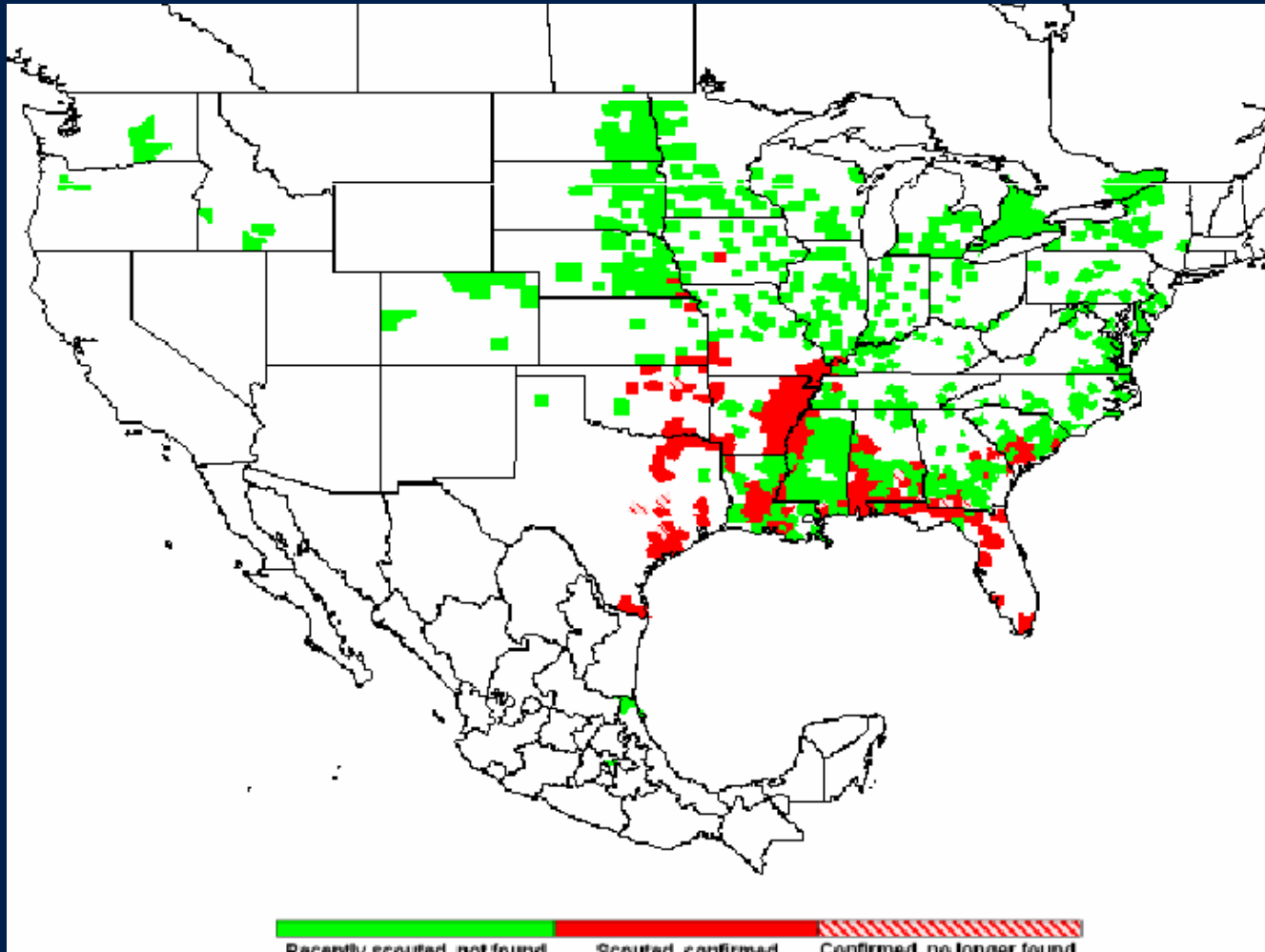
October 2, 2007

- Alabama
- Florida
- Georgia
- Texas
- Louisiana
- Mississippi
- Oklahoma
- Arkansas
- Missouri
- South Carolina
- Kentucky
- Kansas
- Illinois
- Iowa



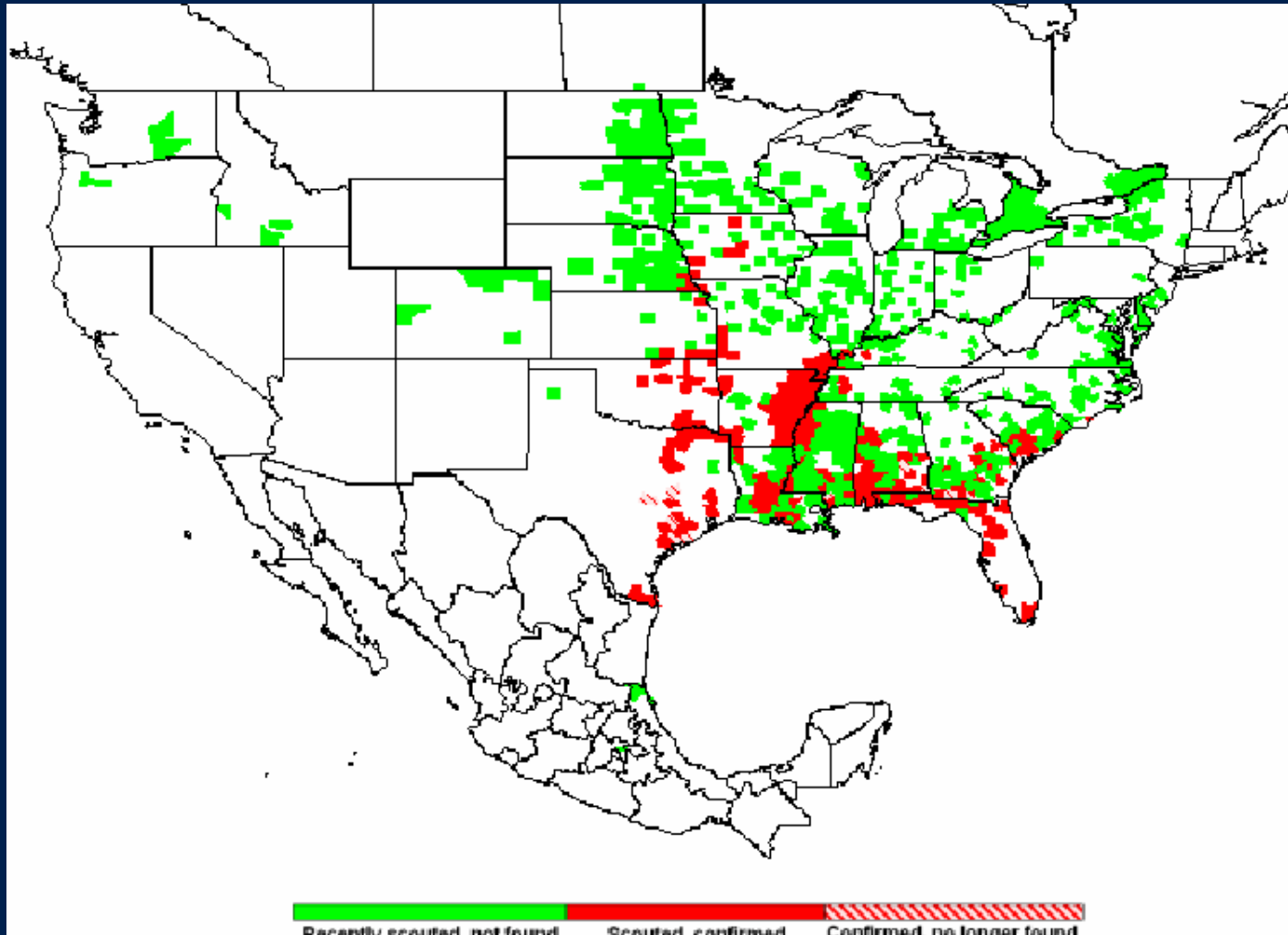
October 9, 2007

- Alabama
- Florida
- Georgia
- Texas
- Louisiana
- Mississippi
- Oklahoma
- Arkansas
- Missouri
- South Carolina
- Kentucky
- Kansas
- Iowa
- Nebraska
- Tennessee



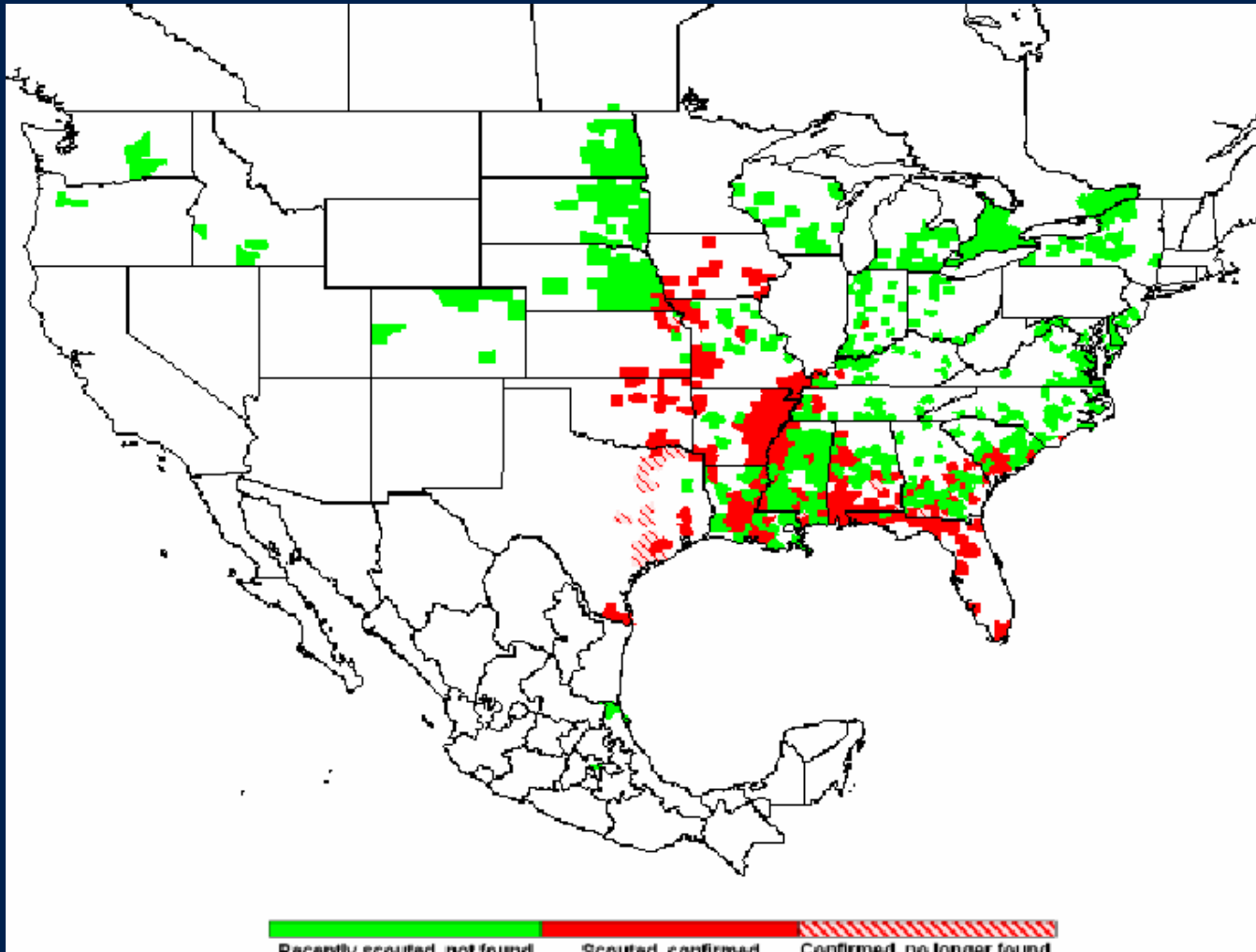
October 16, 2007

- Alabama
- Florida
- Georgia
- Texas
- Louisiana
- Mississippi
- Oklahoma
- Arkansas
- Missouri
- South Carolina
- Kentucky
- Kansas
- Illinois
- Iowa
- Nebraska
- Tennessee
- North Carolina



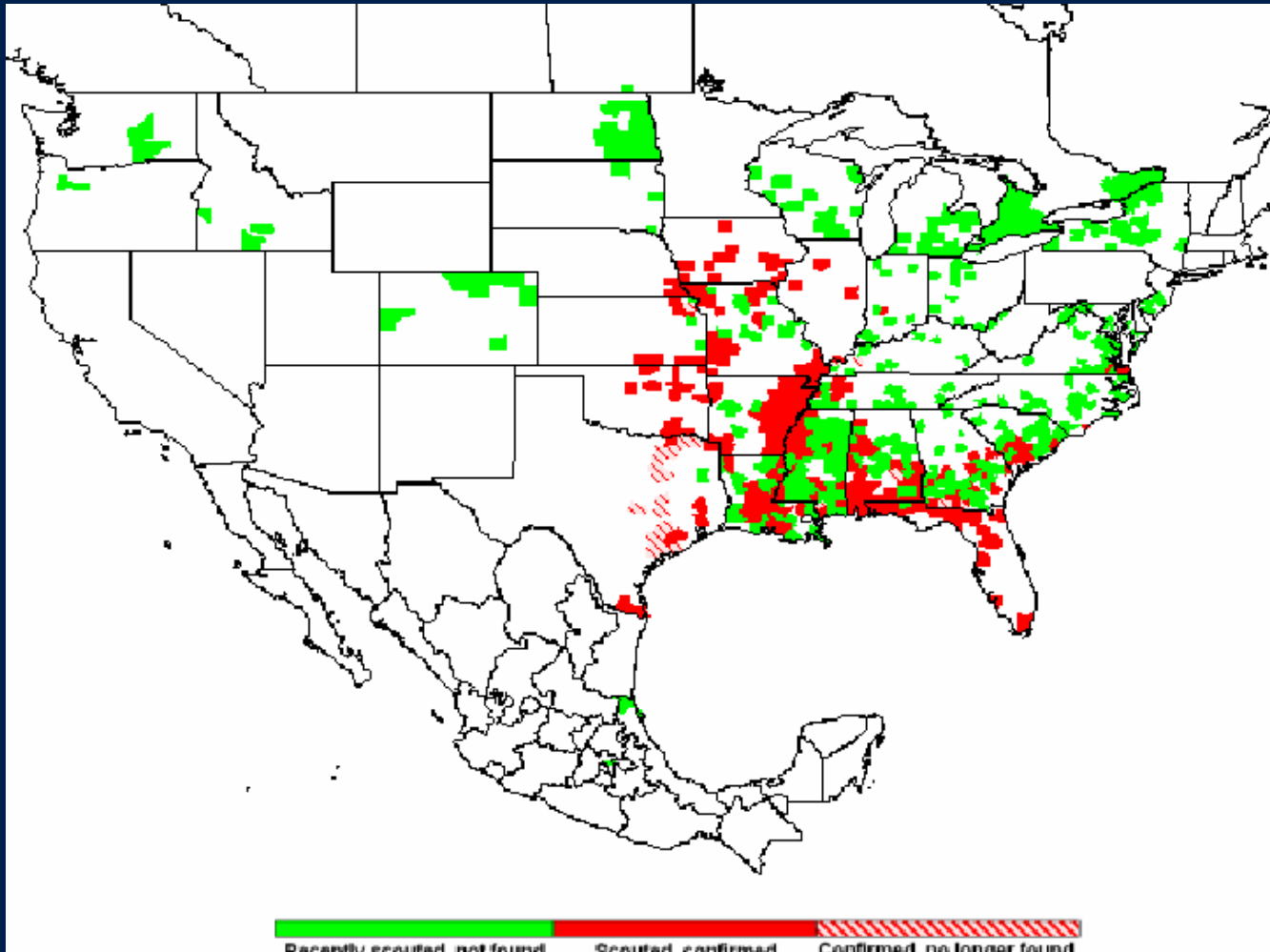
October 23, 2007

- Alabama
- Florida
- Georgia
- Texas
- Louisiana
- Mississippi
- Oklahoma
- Arkansas
- Missouri
- South Carolina
- Kentucky
- Kansas
- Illinois
- Iowa
- Nebraska
- Tennessee
- North Carolina
- Indiana



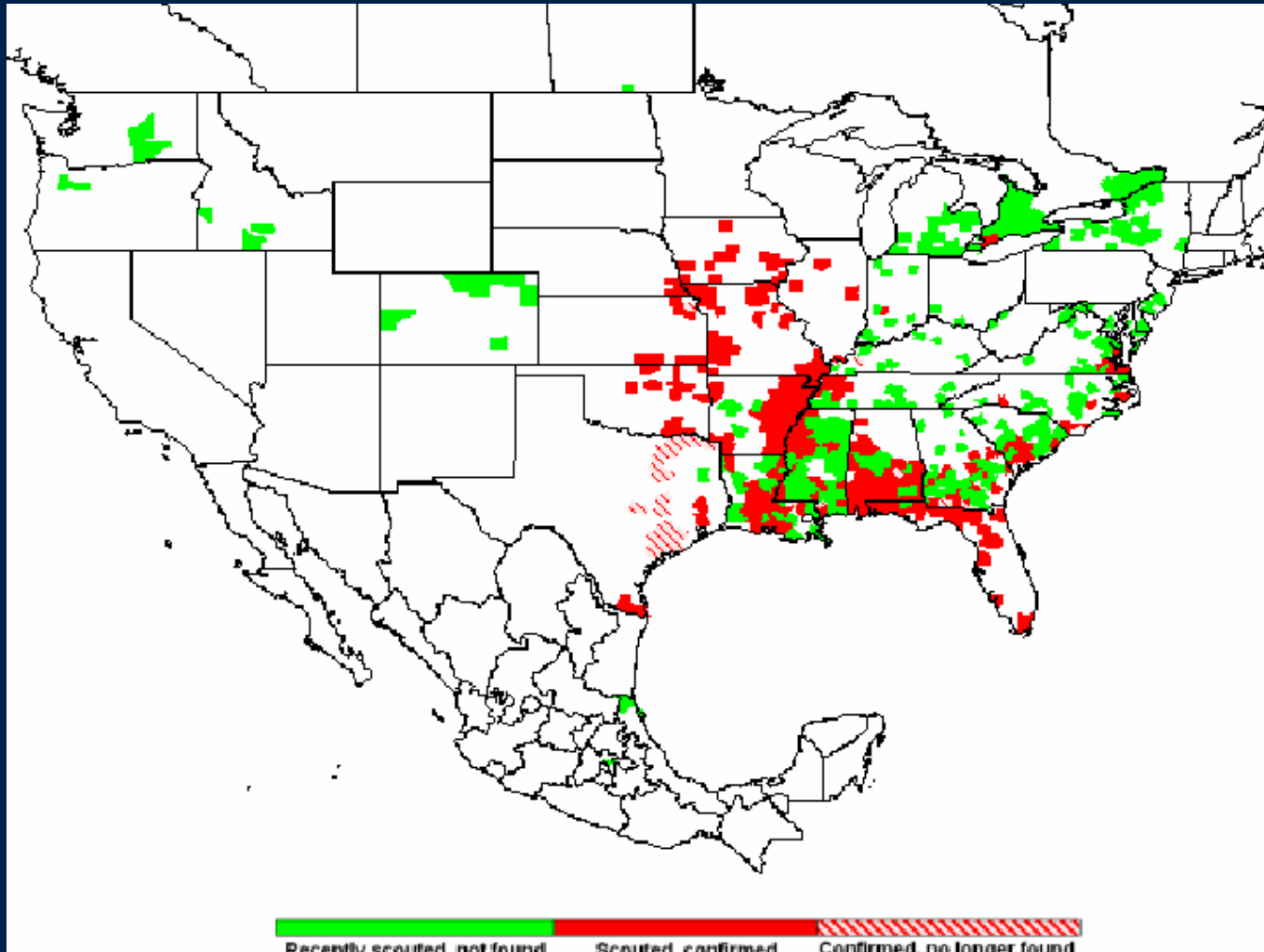
October 30, 2007

- Alabama
- Florida
- Georgia
- Texas
- Louisiana
- Mississippi
- Oklahoma
- Arkansas
- Missouri
- South Carolina
- Kentucky
- Kansas
- Illinois
- Iowa
- Nebraska
- Tennessee
- North Carolina
- Indiana
- Virginia

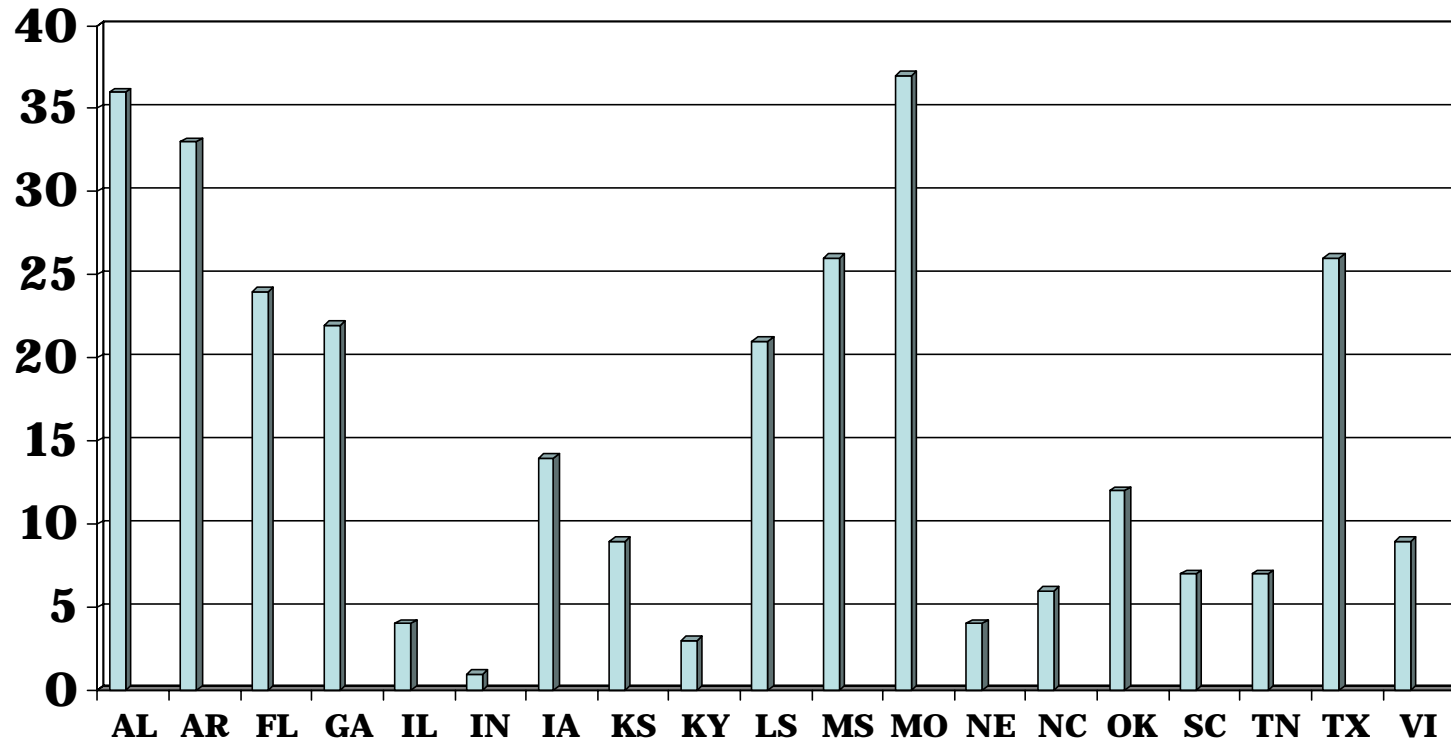


November 16, 2007

- Alabama
- Florida
- Georgia
- Texas
- Louisiana
- Mississippi
- Oklahoma
- Arkansas
- Missouri
- South Carolina
- Kentucky
- Kansas
- Illinois
- Iowa
- Nebraska
- Tennessee
- North Carolina
- Indiana
- Virginia
- Ontario



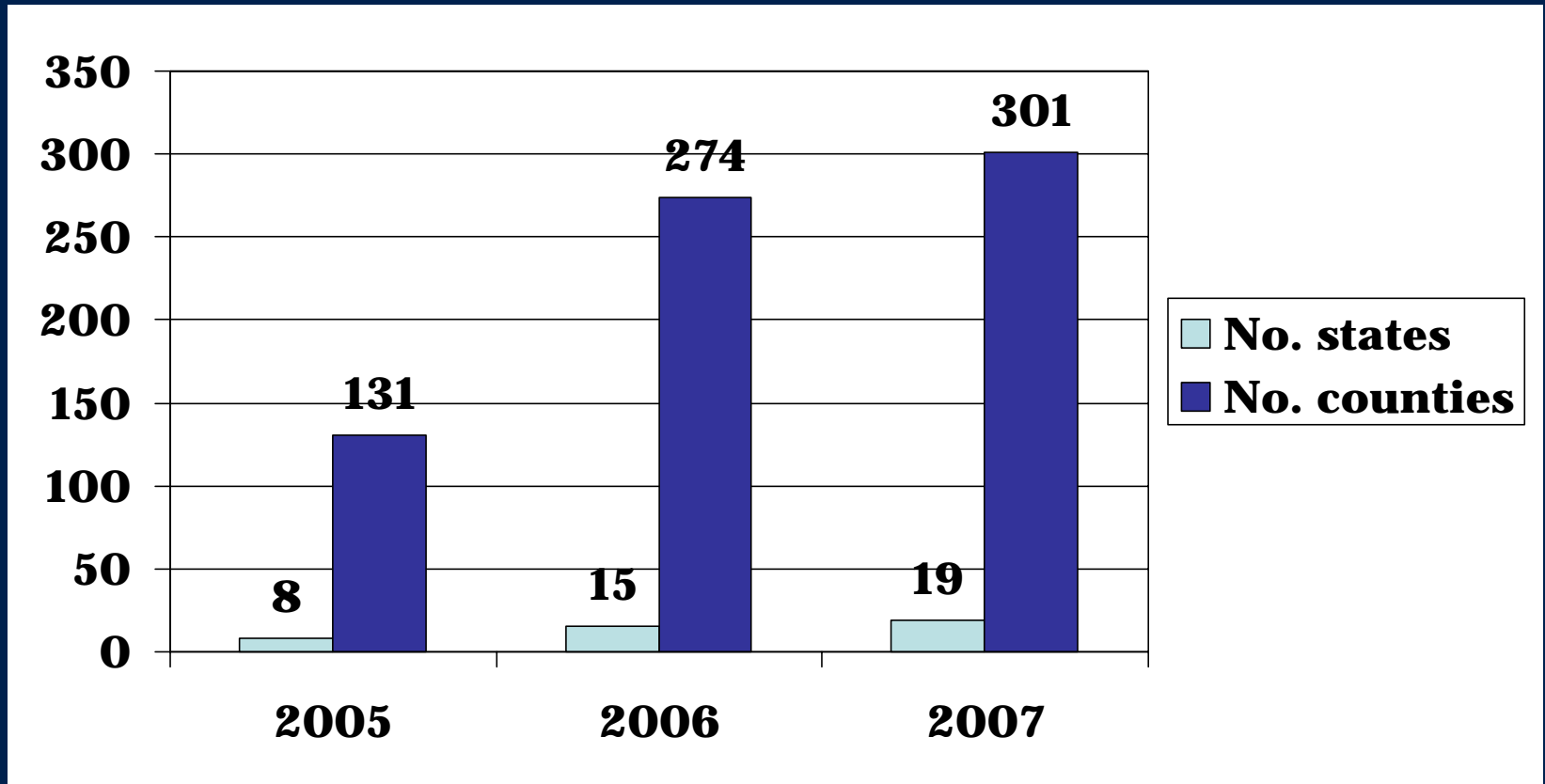
Number of counties by state in 2007



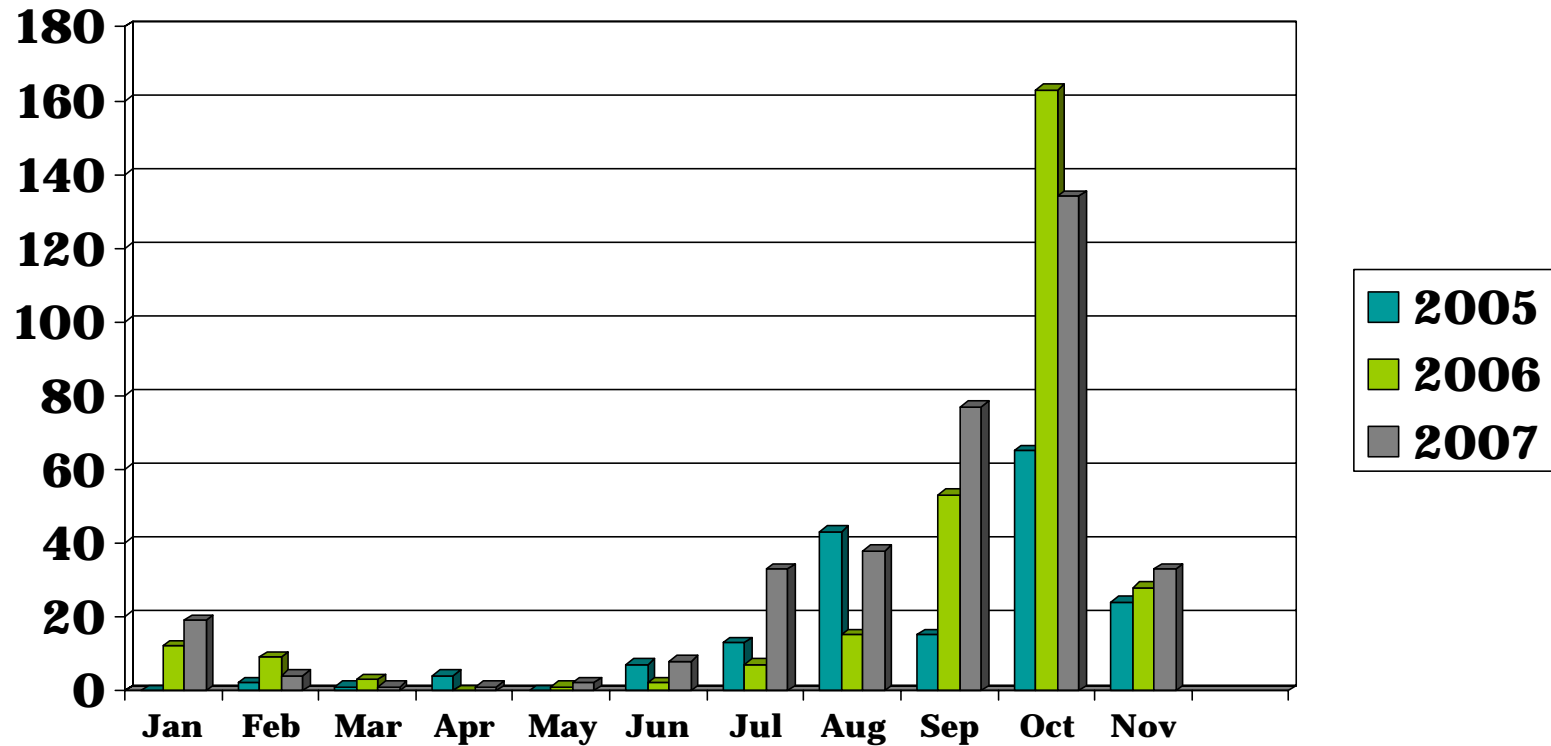
Total = 301 counties



Comparison of 2005, 2006, & 2007 for U.S.



No. of positive counties by month

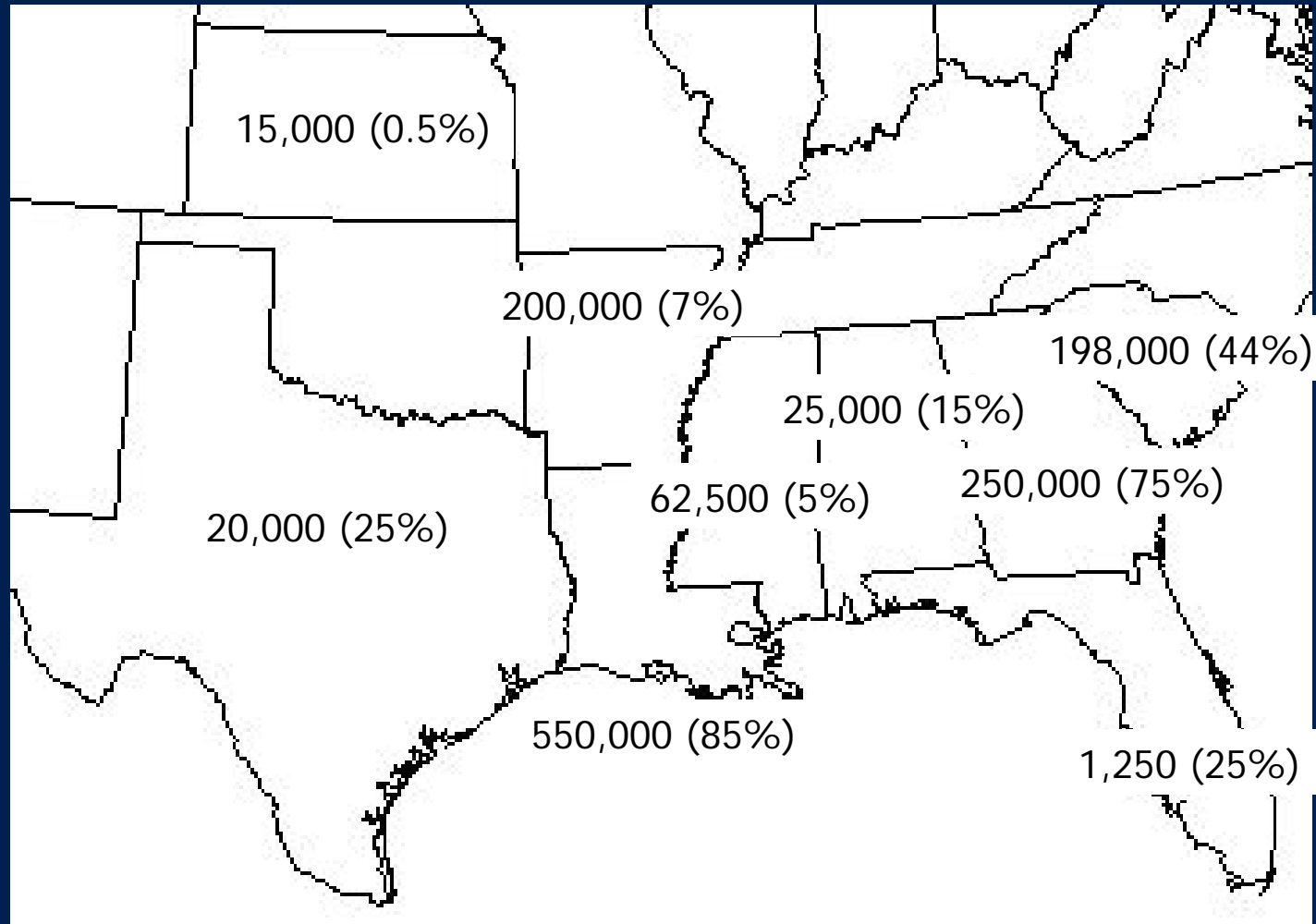


Response to rust – fungicide applications

- Fungicides were applied to soybean in the U.S. to manage soybean rust in 2007
- How many soybean acres were sprayed?
 - Giesler and Hershman survey – estimate of **1.34 million acres** in the U.S.



States with soybean rust or adjacent to states with soybean rust at a time when crop was susceptible to yield loss (prior to R6)



- B. Kemeraït
- E. Sikora
- T. Allen
- C. Hollier
- J. Marois
- S. Monfort
- J. Mueller
- T. Isakeit
- D. Jardine

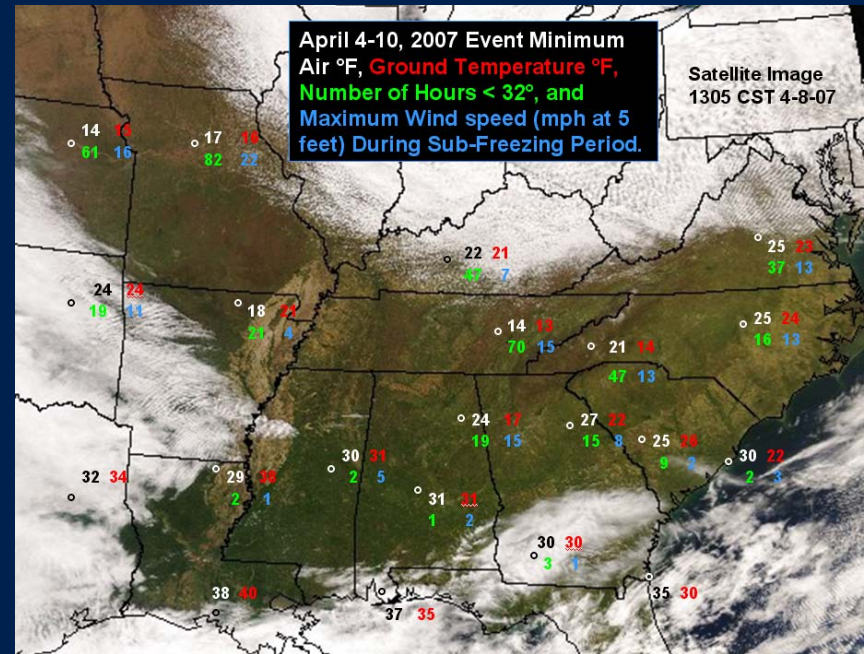
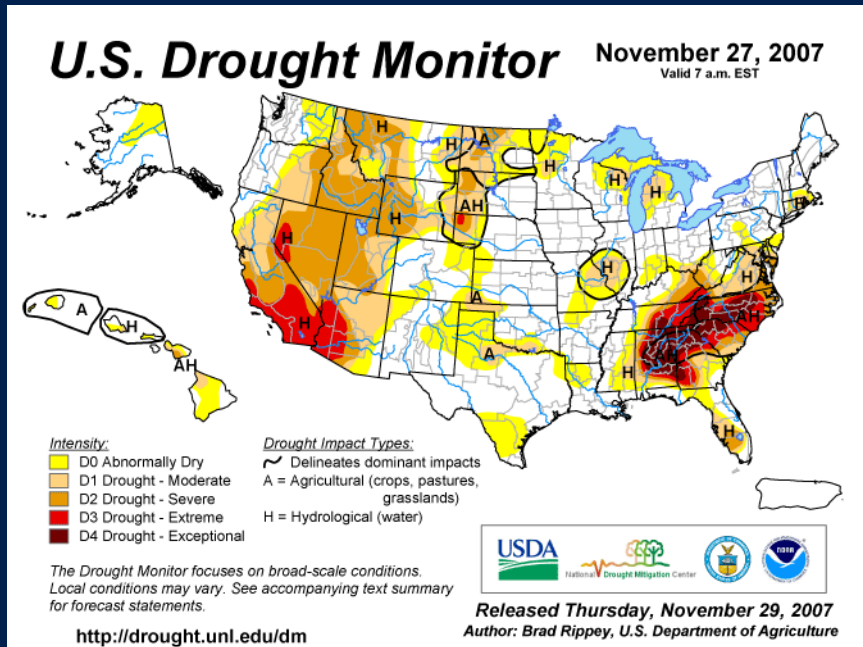
Summary of 2007

- Found in a total of 19 states in U.S. (most yet)
 - Iowa, Kansas, Nebraska, and Oklahoma – 1st finds
- Found in a total of 301 counties in 2007 (most)
- First find in Canada (Ontario)
- Northernmost find to date came in 2007:
 - Hancock County, Iowa



Summary of 2007

- Weather factors were very important



Thank you!

