

Overview and Value of Sentinel Plots for 2007

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2007 Sentinel Survey

- Survey sent to SBR Sentinel Listserve (Coordinators in 36 states, 2 provinces, and Puerto Rico).
- Responses received by 28 states, 1 province and Puerto Rico.
- U.S. responses represent 40.34 million soybean acres*

**63.4% of U.S.'s 63.67 million acres*

Total Number of SBR Sentinel Plots

Totals

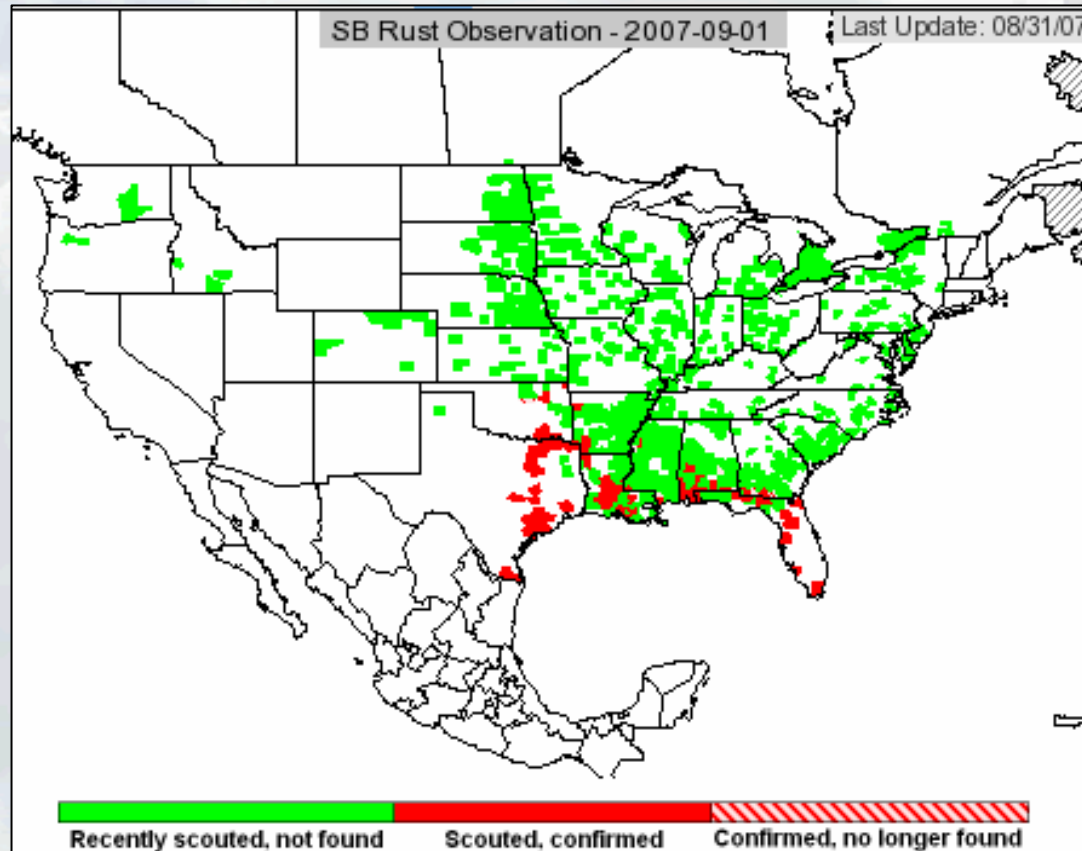
*Soybean: 655 (650)**

Kudzu: 65 (64)

Other: 93 (39)

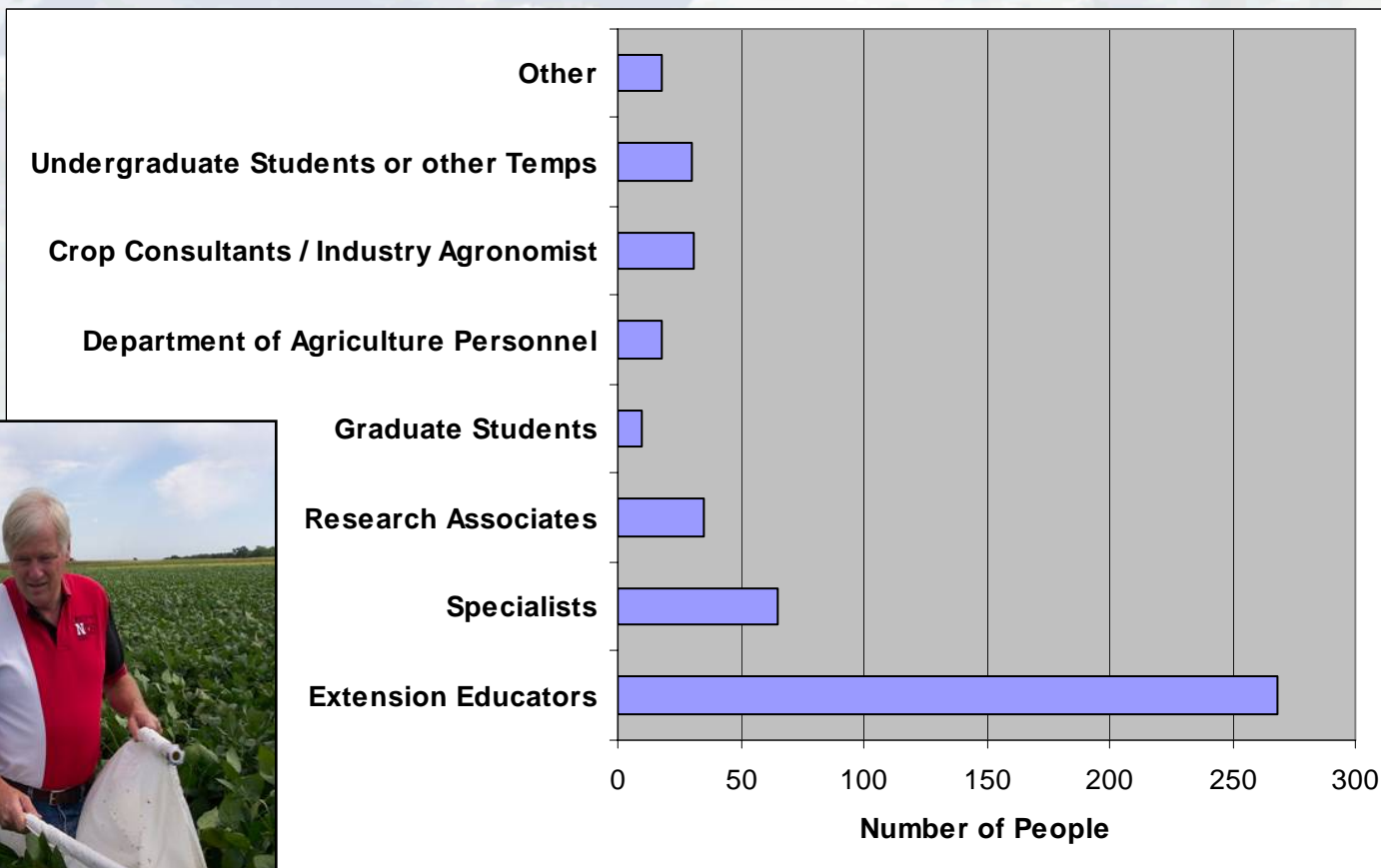
All hosts: 813 (753)

** () = 2006 numbers*

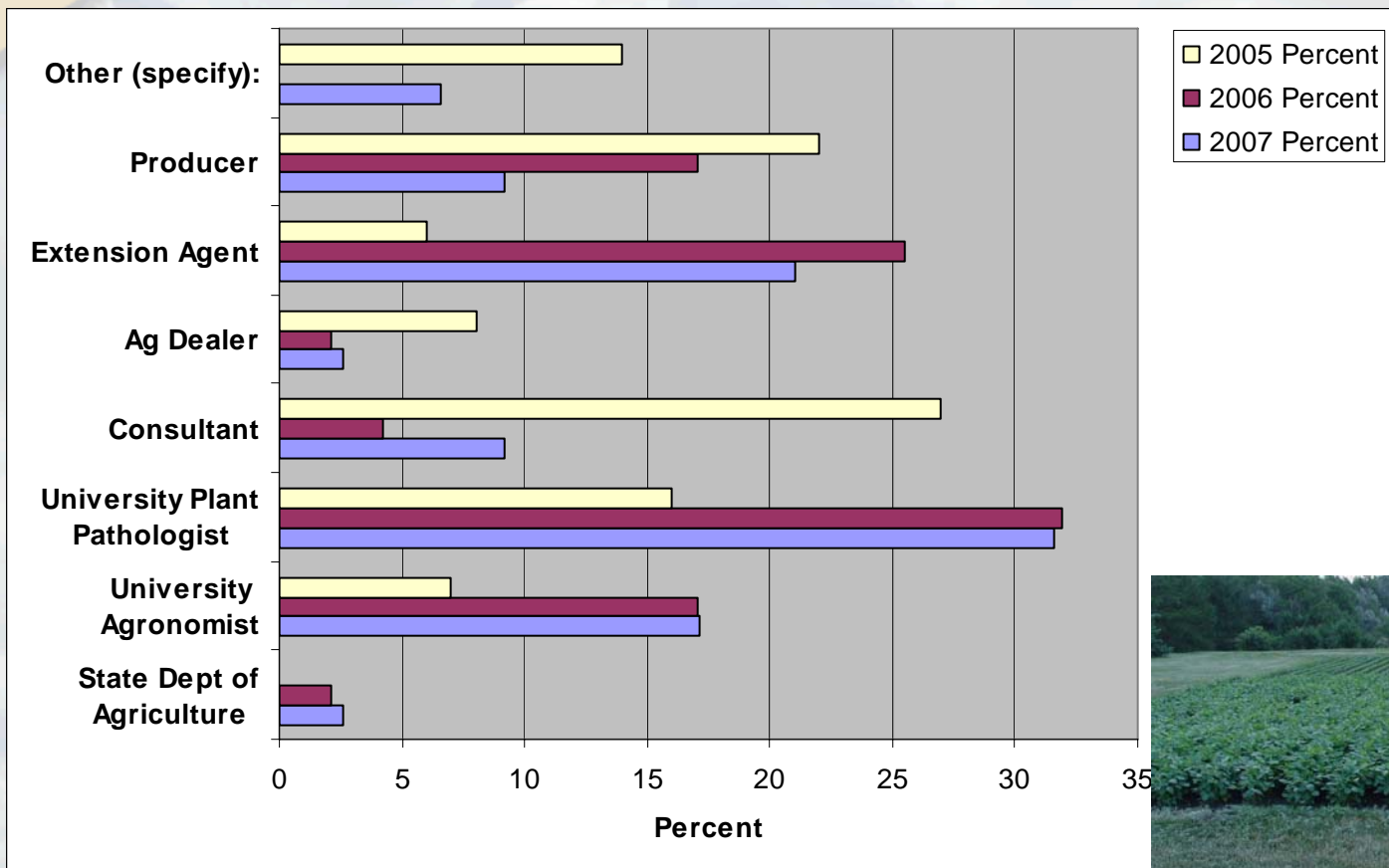


How many people were directly involved in your sentinel monitoring program?

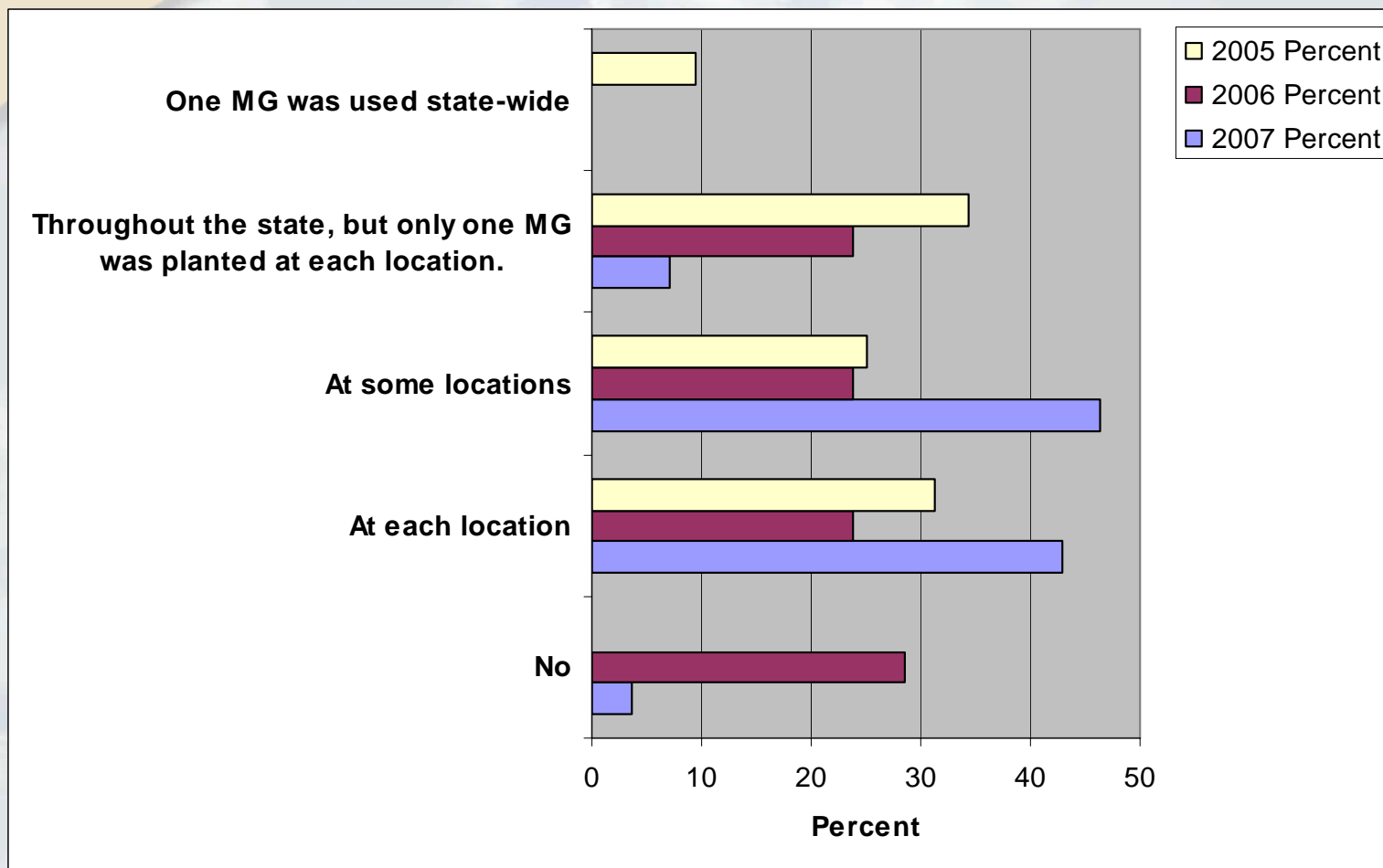
475 people involved based on survey responses.



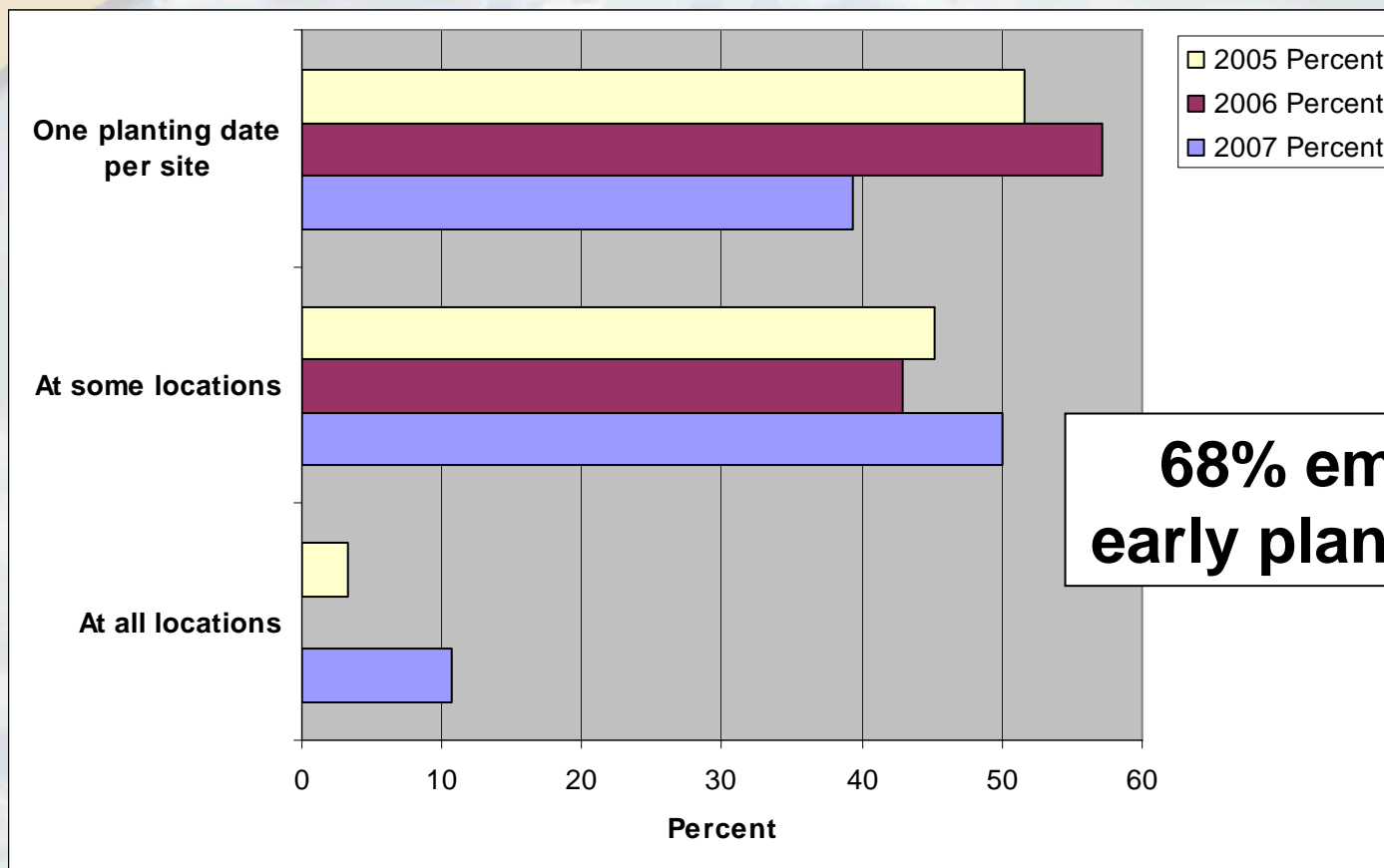
Which entity(ies) established your sentinel plots?



Were multiple soybean maturity groups planted?

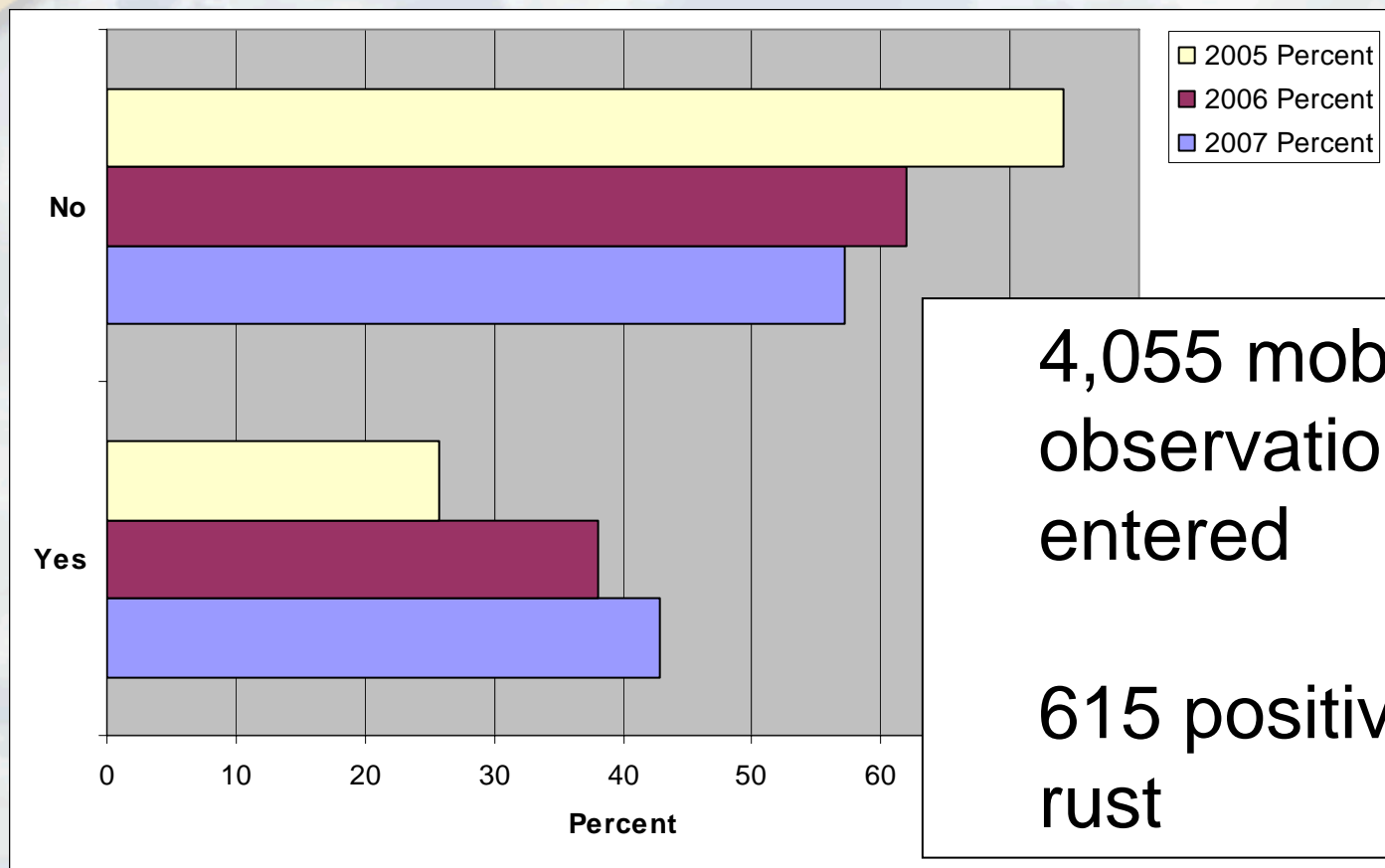


Were multiple planting dates implemented?



68% emphasized early planting in 2007

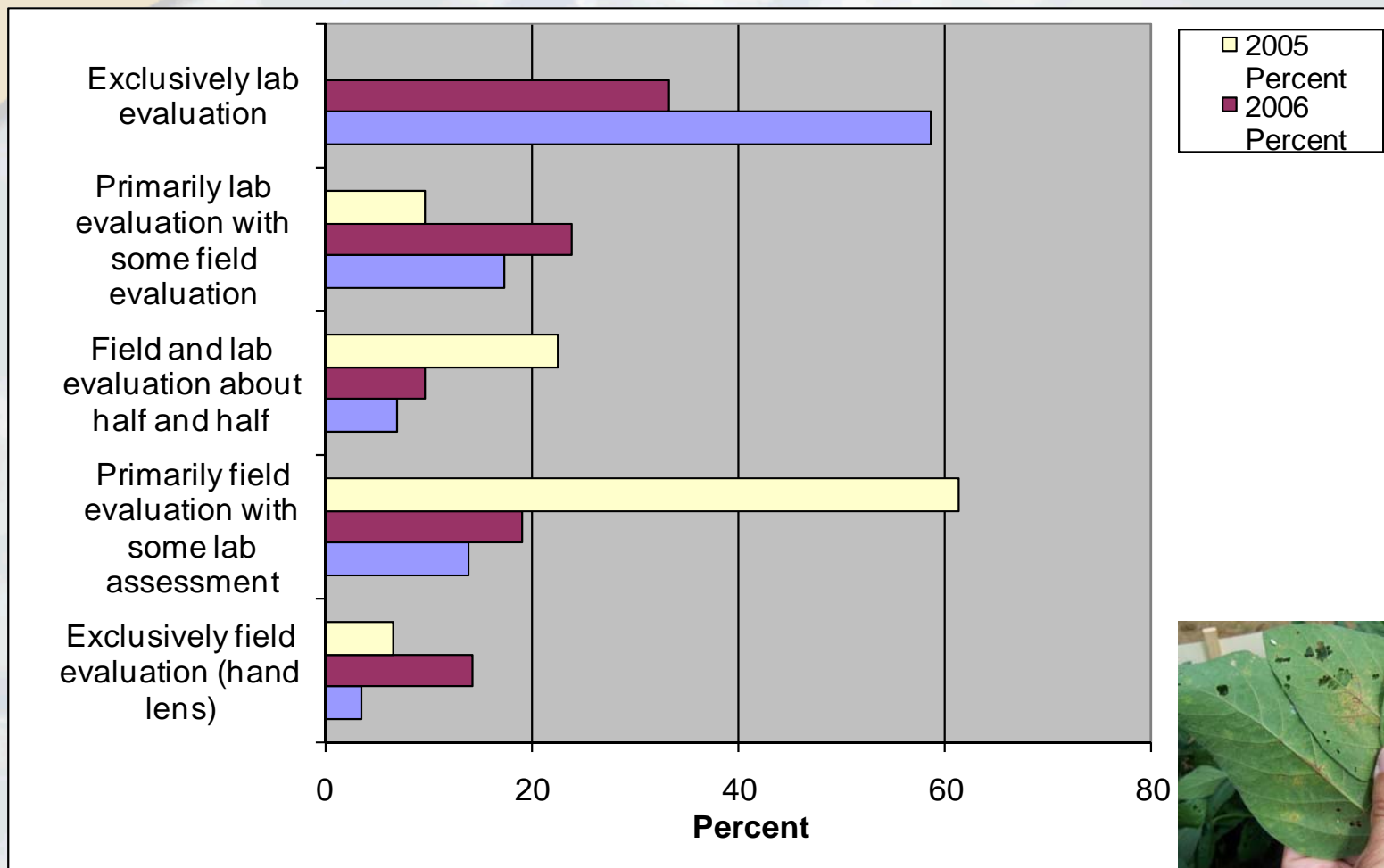
Were mobile observations a big part of your SBR surveillance network in 2007?



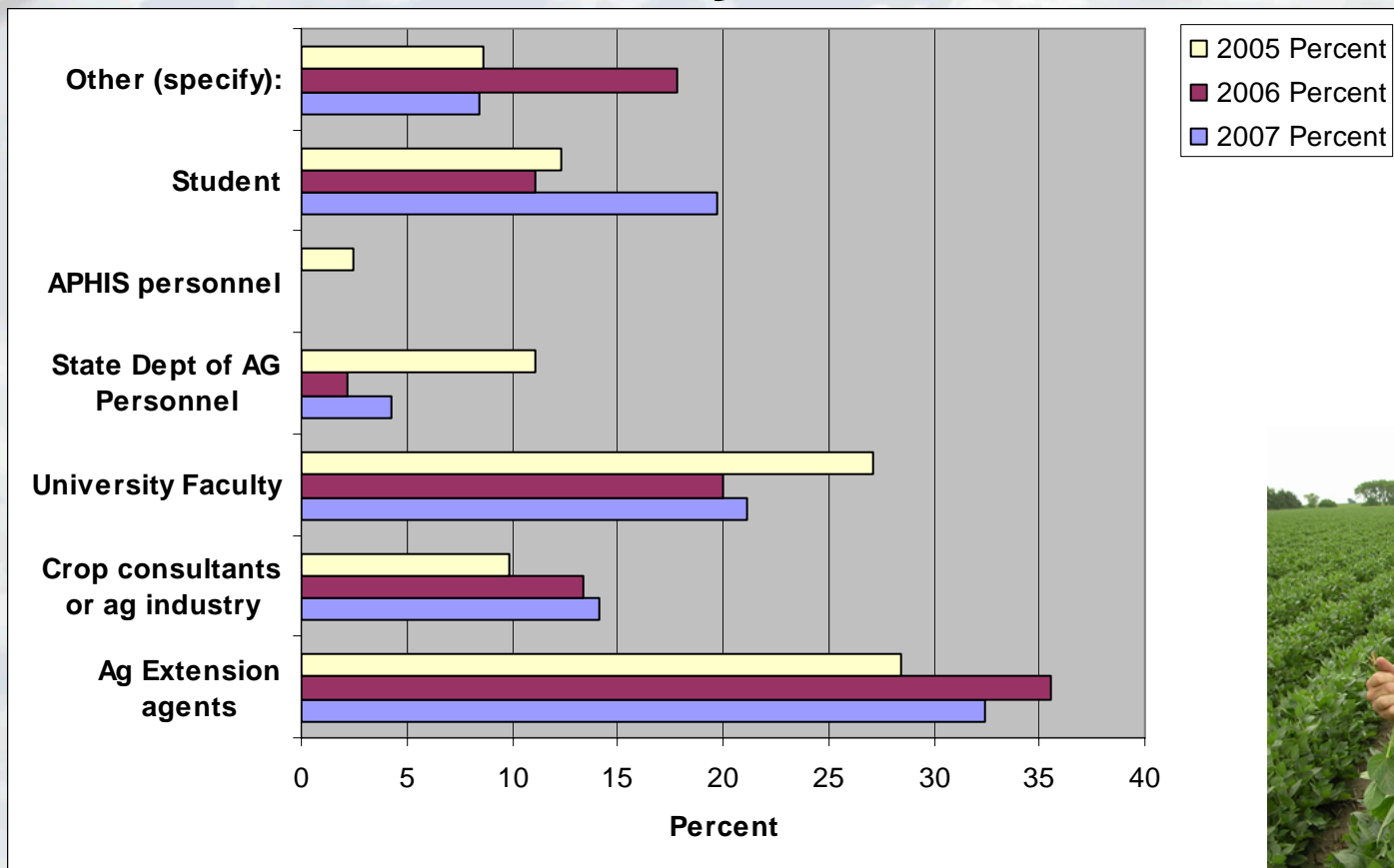
4,055 mobile observations entered

615 positive for rust

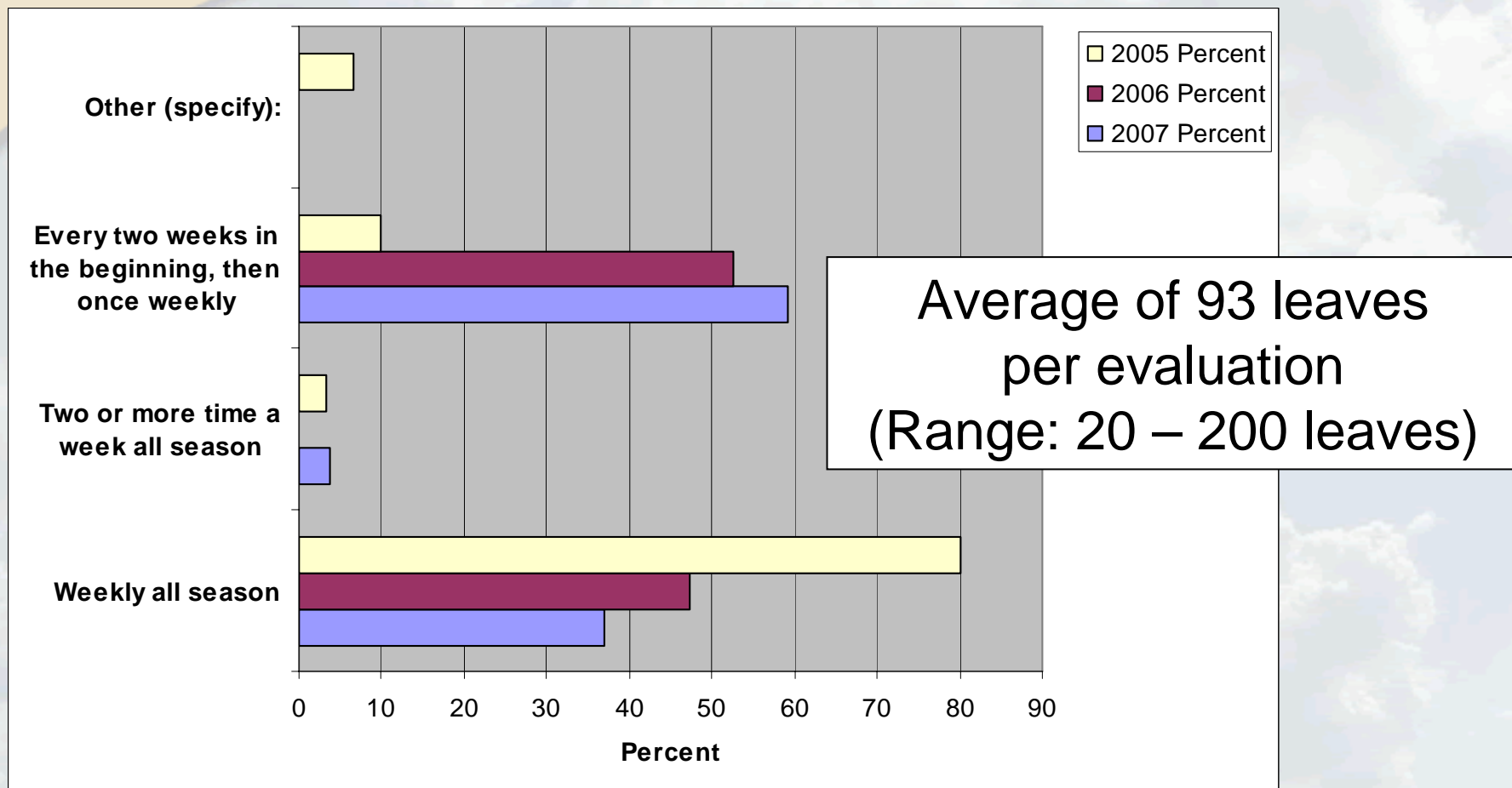
How were sentinel plots evaluated for SBR?



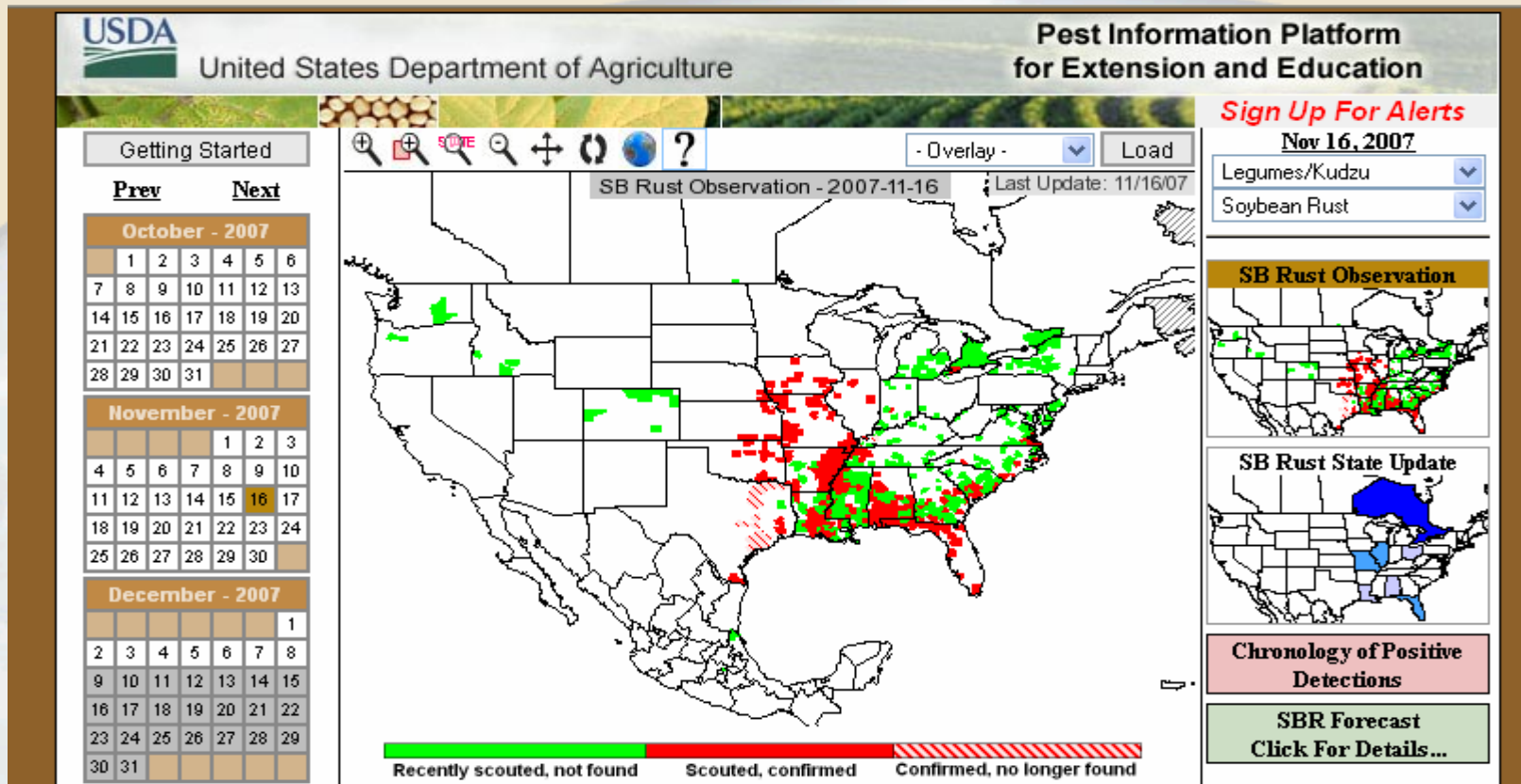
Who was primarily responsible for collecting leaves from soybean or kudzu sentinel plots for field and/or laboratory observation?



How often were sentinel plots monitored?



Sentinel Network Productivity



13,412 soybean rust observations
uploaded to *ipm*PIPE database in 2007

How many stakeholder contacts did you make, based on information presented on www.sbrusa.net?

- Total number estimated contacts = 163,960
- Average Contacts by State = 6,831

The screenshot shows the USDA Pest Information Platform for Extension and Education. The header includes the USDA logo and the text "United States Department of Agriculture" and "Pest Information Platform for Extension and Education". Below the header, there is a navigation menu with "Getting Started", "Prev", and "Next" buttons. A date selector shows "August - 2007". The main content area features a map with a search bar containing "SB Rust Observation - 2007-09-01" and a "Last Update: 08/31/07" label. There are also "Sign Up For Alerts" and "Sep 01, 2007" options, and a dropdown menu for "Legumes/Kudzu" and "Soybean Rust".

Estimate the percentage of soybean acres that the decision to spray or not was based on information provided (directly or indirectly) by sbrusa.net?

- 73% (range of 5 – 99%) of 40.34 million acres.
- Decisions made based on information provided on the *ipm*PIPE SBR website influenced **30.10 million acres**, based on survey responses.

Estimate the number of acres treated where soybean rust was the primary target?

- 1.34 million acres were sprayed in U.S.
- Thus, 3.3% of the soybean acres in U.S. were sprayed for soybean rust in 2007.
- Range of 0 – 85% in responses.

Estimate of Economic Impact of SBR PIPE

Based on 30.1 million acres influenced by SBR PIPE and \$18/A for a single fungicide application:

- 1.34 million acres sprayed for SBR = \$24M
- At least 28.76 million acres NOT SPRAYED for SBR. Assuming 40% of untreated acres would have been sprayed for SBR if information were lacking, this represents a savings of \$207M.

Value of Sentinel Network

- It works well for monitoring SBR.
 - First finds in 19 different states and 1 province were at very low incidence and severity.
 - 57% of first finds prior to Oct 1 were in sentinel plots.
- Sentinel network provides framework for mobile observation activities.
- Used for ground-truthing and refining disease models.

Value of SBR PIPE

- Works well for communicating SBR risk to stakeholders.
- Saves money over what would have been spent if SBR PIPE did not exist.
- Environmental benefits of not inappropriately spraying millions of acres is significant but hard to measure.
- Greatly encourages collaboration and communication at all levels.



Thanks to all of our Cooperators!!