FIA Landowner Surveys

2019 FIA User Group Meeting
16-18 April 2019
FIA Landowner Surveys

- Woodland owner
- Urban
- Large corporate
National Woodland Owner Survey
NWOS Implementation

• 2017-2018
  – 15,305 responses
  – 43% cooperation rate

• 2019+
  – Annualized!
  – 3,793 contacts in 2019
NWOS Implementation

1. Select a state
2. Generate hexagons
3. Generate points
4. Determine land use
5. If sample point is forested, go to Step 5.
6. Send survey

Select a state: Wisconsin

Generate hexagons:

Generate points:

Determine land use:

Send survey:
NWOS Implementation

5 Identify LANDowner
   Using public tax records.
   If the ownership is private,
   go to step 6.

6 SENDSURVEY

7 LANDOWNER COMPLETES
   AND RETURNS THE SURVEY

For more information visit: www.fia.fs.fed.us/nwos
NWOS Implementation

8. Process data and produce estimates

\[ \hat{O}_{sd} = \sum_{i=1}^{ns} (w_{fsi} \times d_i \times d_i) \]

9. Publish results
NWOS Science

- Weighting*
- Imputation*
- Nonresponse*
- Other documentation*
- Age
- Conservation attitudes
- Minority landowners
- Ecosystem services
- Farmers
- Small-scale forestry
- Size*
- Parcellation*
- Ownership dynamics*

* Forthcoming
NWOS Tools

• NWOS TableMaker
• Next Gen
  – R Shiny
  – Custom reports
Size of Holdings
Size of Holdings

A.

B.
Size of Holdings
Forest Parcellation

Change in Average Forest Parcel Size for the Southern U.S.
Changing Landowner Attributes
Differences between Cohorts

- Prefers help via internet
- Recreate on land
- Likely to transfer land
- Objective: recreation
- Ever cut timber for sale
- Cost share programs helpful
- Objective: privacy
- Size of forest holdings
Combining NWOS & Plot Data

Timber Harvesting, US North and South

ft³/ac/yr

Corporate
Family
Other private
Tribal
Federal
State
Local

0
10
20
30
40
Combining NWOS & Plot Data

Family Forest Timber Harvesting, US North and South

Size of Holdings (ac)
Combining NWOS & Plot Data
Family Forest Timber Harvesting, US North and South

Size of Holdings (ac)

<table>
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<tr>
<th>Size</th>
<th>ft$^3$/ac/yr</th>
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<tbody>
<tr>
<td>1-19</td>
<td></td>
</tr>
<tr>
<td>20-49</td>
<td></td>
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<td>50-99</td>
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<tr>
<td>500-999</td>
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<tr>
<td>1000+</td>
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Urban National Landowner Survey
UNLS Implementation

- **Target population**
  - Urban Residential Owners
- **Methods**
  - Area based sampling frame
  - Four-wave “Dillman” method
  - Target 100 responses per city
  - Annual implementation
- **Topics**
  - Ownership information
  - Property information
  - Management activities
  - Neighborhood attributes
  - Urban wood use
  - Demographics

Initiated in
- ▲ 2018
- ◊ 2019
Large Corporate Forest Landowner Survey
(Will be Covered by Andy Hartsell)
Forest Landowner Dynamics
Forest Ownership
United States*

* Excluding: AK, CA, HI, MS, OK, OR, WA, and WY
TIMO/REIT, 2015
Percentage of Forestland

[Map showing the percentage of forestland across the United States.]

- Percentage [0,5]
- (5,10]
- (10,15]
- (15,20]
- (20,25]
- (25,50]
- (50,100]
- NA

TIMO/REIT (Proportion of All Forestland)
Large Corporate, 2015
Percentage of Forestland

TIMO/REIT (Proportion of All Forestland)

LargeCorp (Proportion of All Forestland)
Non-response Assessment
Plot Nonresponse Rate

% nonsampled

inventory year

reason
outside USA
denied access
hazardous
lost data
lost plot
wrong location
skipped visit
other
Plot Nonresponse Rate
General Thoughts

• 2018 NWOS results later this year!!
  – Trend analyses will be a major future focus
• Limited resources to expand urban
• What is next for corporate?
• Islands, Tribal, Other corporate, Public, …
Comments or Questions?