Small-Scale Forestry in the United States: The Urban-Rural Continuum

Brett J. Butler, U.S. Forest Service
Outline

- Forest dimensions
- Forest ownership in the United States
- Forest ownership along the urban-rural continuum
- Implications
Forest Dimensions
National Woodland Owner Survey

Conducted by the U.S. Forest Service, Forest Inventory and Analysis program

To better understand:
- Who the landowners are
- Why they own land
- How they have used it
- How they intend to use it
National Woodland Owner Survey

- Simple random sample/probability proportional to size
- Sample size: 15,440 respondents
- Cooperation rate: 51%
Forest Ownership
United States, 2006

- Family: 36%
- Federal: 33%
- State: 9%
- Local: 1%
- Other private: 21%
Size of Family Forest Holdings
United States, 2006

Size of Family Forest Holdings (Hectares)

0% 10% 20% 30% 40% 50% 60% 70%

0.5-4 5-9 10-19 20-39 40-79 80-199 200-399 400+

Area
Owners
Family Forest Ownership Objectives
United States, 2006

- Aesthetics
- Family legacy
- Privacy
- Nature protection
- Part of home or cabin
- Land investment

Percent of Family Forest Land

0% 10% 20% 30% 40% 50% 60% 70%
Family Forest Ownership Objectives
United States, 2006

<table>
<thead>
<tr>
<th>Objective</th>
<th>Percent of Family Forest Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunting or fishing</td>
<td>40%</td>
</tr>
<tr>
<td>Part of farm</td>
<td>40%</td>
</tr>
<tr>
<td>Other recreation</td>
<td>30%</td>
</tr>
<tr>
<td>Timber production</td>
<td>30%</td>
</tr>
<tr>
<td>Firewood production</td>
<td>20%</td>
</tr>
<tr>
<td>Nontimber forest products</td>
<td>10%</td>
</tr>
</tbody>
</table>
Attitudinal Segmentation*
United States, 2006

- Uninvolved: 22%
- Supplemental Income: 21%
- Working the Land: 25%
- Woodland Retreat: 32%

* Sustaining Family Forests Initiative
  Family forest owners with 4-400 ha of forest land
Family Forest Management Practices
United States, 2006

- Timber harvesting
  58% of family forestland

- Forest management plan
  18% of family forestland

- Management advice
  37% of family forestland
Plans for Family Forest Land
United States, 2006

- None/minimal
- Firewood
- Timber
- Heirs/sell
- Buy

Percent of Family Forest Land

0% 10% 20% 30% 40% 50% 60% 70% 80%
Urban-Rural Continuum
Urban-Rural Continuum

- **Urban**
  - Counties in metro areas of 1,000,000+ people

- **Suburban**
  - Counties in metro areas of < 1,000,000 people

- **Rural**
  - Counties not a part of a metro area
Urban-Rural Continuum

US Census Bureau,
US Office of Management and Budget, and
USDA Economic Research Service
www.ers.usda.gov/Briefing/Rurality/
Mean Size of Family Forest Holdings United States, 2006 by Rurality
## Size of Family Forest Holdings
United States, 2006

<table>
<thead>
<tr>
<th>Size (ha)</th>
<th>Area (1000s ha)</th>
<th>Owners (1000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5-4</td>
<td>7,753</td>
<td>6,220</td>
</tr>
<tr>
<td>5-19</td>
<td>23,708</td>
<td>2,831</td>
</tr>
<tr>
<td>20-39</td>
<td>16,819</td>
<td>644</td>
</tr>
<tr>
<td>40-399</td>
<td>39,525</td>
<td>508</td>
</tr>
<tr>
<td>400+</td>
<td>14,165</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>101,972</strong></td>
<td><strong>10,222</strong></td>
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</tbody>
</table>
Land Tenure (25+ years)
Objectives - Aesthetics

Size of Family Forest Holdings (ha)

- 400+
- 40-399
- 20-39
- 5-19
- 0.5-4

Percentage of Family Forest Land

0% 20% 40% 60% 80% 100%
Objectives - Timber

Size of Family Forest Holdings (ha)

- 0.5-4
- 5-19
- 20-39
- 40-399
- 400+

Percentage of Family Forest Land

- 0%
- 20%
- 40%
- 60%
- 80%
- 100%
Part of Home

Size of Family Forest Holdings (ha)

- 400+
- 40-399
- 20-39
- 5-19
- 0.5-4

Percentage of Family Forest Land

0% 20% 40% 60% 80% 100%
Leasing

Size of Family Forest Holdings (ha)

<table>
<thead>
<tr>
<th>Size Range</th>
<th>Percentage of Family Forest Land</th>
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<tbody>
<tr>
<td>0.5-4</td>
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<td></td>
</tr>
<tr>
<td>400+</td>
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</table>

Percentage of Family Forest Land
Cost-share

Size of Family Forest Holdings (ha)

- 400+
- 40-399
- 20-39
- 5-19
- 0.5-4

Percentage of Family Forest Land

0% 20% 40% 60% 80% 100%
Harvesting

Size of Family Forest Holdings (ha)

- 0.5-4
- 5-19
- 20-39
- 40-399
- 400+

Percentage of Family Forest Land

0% 20% 40% 60% 80% 100%
Management Plans

Size of Family Forest Holdings (ha)

- 0.5-4
- 5-19
- 20-39
- 40-399
- 400+

Percentage of Family Forest Land

0% 20% 40% 60% 80% 100%
Management Advice

- Size of Family Forest Holdings (ha):
  - 0.5-4
  - 5-19
  - 20-39
  - 40-399
  - 400+

- Percentage of Family Forest Land:
  - 0%
  - 20%
  - 40%
  - 60%
  - 80%
  - 100%
## Summary

<table>
<thead>
<tr>
<th></th>
<th>Small</th>
<th>Large</th>
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<tbody>
<tr>
<td>Tenure</td>
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<td>+</td>
</tr>
<tr>
<td>Aesthetics</td>
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<tr>
<td>Timber</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Part of home</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Leasing</td>
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<td>Cost-share</td>
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<tr>
<td>Management plan</td>
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<td>Advice</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Sell/heirs</td>
<td>-</td>
<td>+</td>
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</tbody>
</table>
Private Ownership Trends

Year

Area (1,000,000 ha)

Owners (1,000,000)

1978 1993 2006

Area Owners

Area (1,000,000 ha)

Owners (1,000,000)
Average Size of Holdings

Year
1978 1993 2006
Average Size of Family Forest Holdings (ha)
Conclusions

- Family forest owners rule!
- Size matters
- Better outreach and tools
Questions/comments?

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www.fia.fs.fed.us/nwos