Defining Early Seral Habitats
Industry Perspectives

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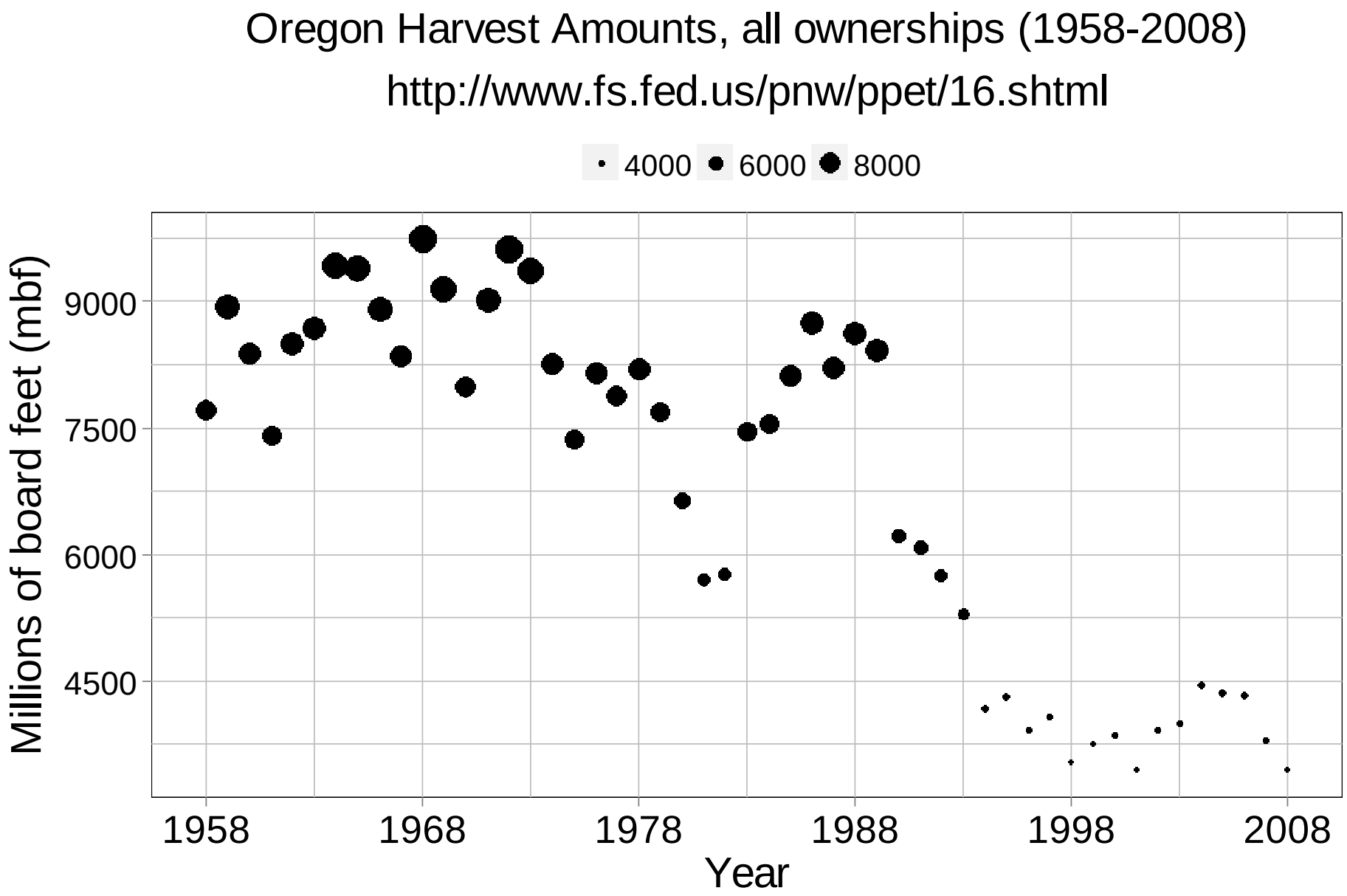
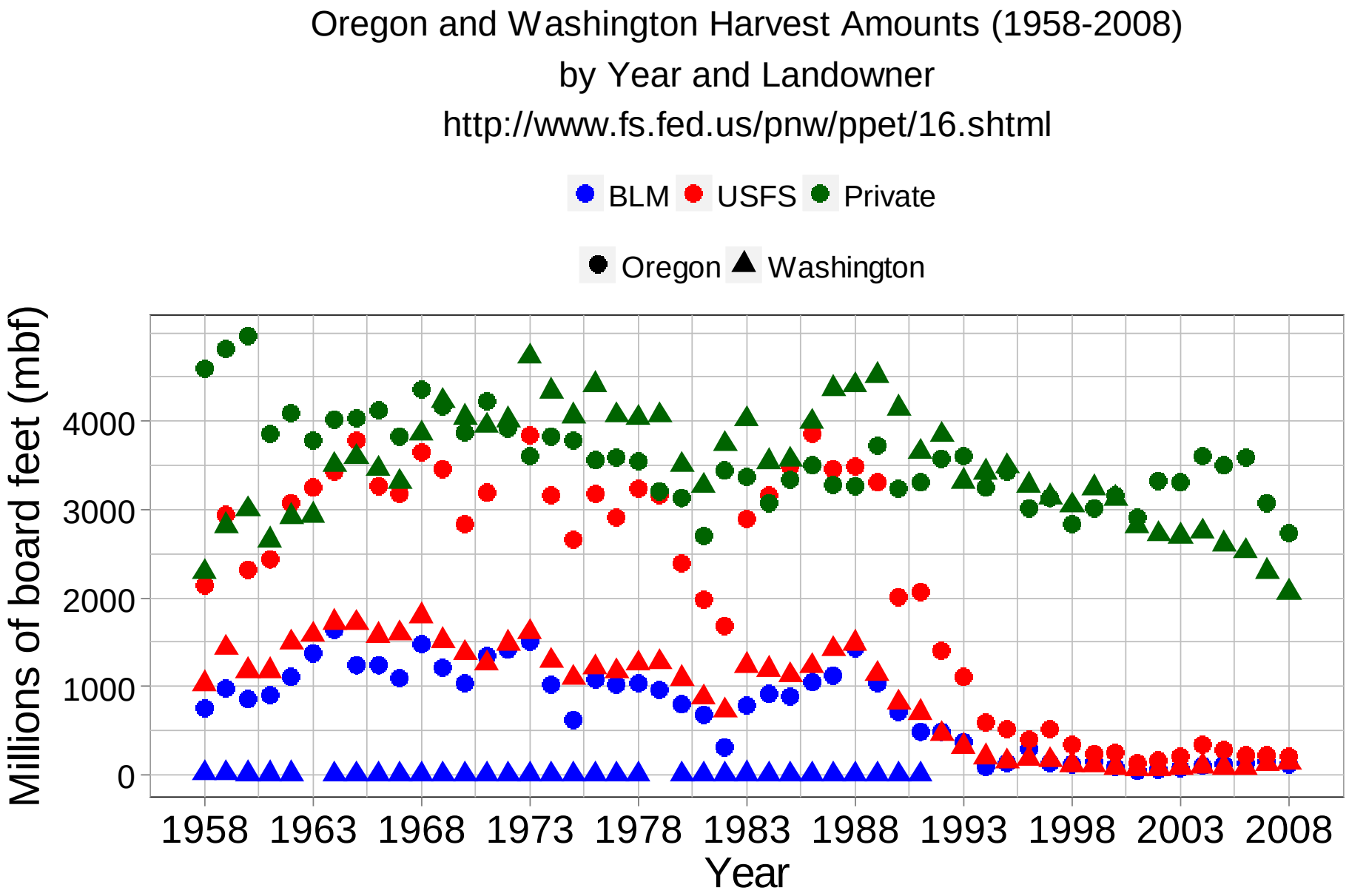
An Industry “Perspective” Does not Exist

- Many landowners raise timber as a crop
- Differing value propositions
- Scale of operations influences practices
- Management incorporates multiple values, but *timber crop is paramount*


Oregon Harvest Amounts, all ownerships (1958-2008)
http://www.fs.fed.us/pnw/ppet/16.shtml
4000
6000
8000
Millions of board feet (mbf)
9000
7500
6000
4500
1958
1968
1978
1988
1998
2008
Year


Oregon and Washington Harvest Amounts (1958-2008)
by Year and Landowner
http://www.fs.fed.us/pnw/ppet/16.shtml
BLM
USFS
Private
Oregon
Washington
Millions of board feet (mbf)
0
1000
2000
3000
4000
1958
1963
1968
1973
1978
1983
1988
1993
1998
2003
2008
Year

Where did the Logs Go?

- Average U.S. home size doubled in ~50 years
  - Average size of ~2300 square feet (2005)
- 1978-2009, ~47 million homes built in the U.S.
- 466 billion board feet of logs needed to build these homes, or ~15 billion board feet *per year*
- USFS cut averaged ~12 billion board feet per year in the period from 1978-1988
  - ~3 billion bbf from Oregon

Timber Economics

A global landscape

- Wood is a global commodity
- By 2006, nearly 80% of industry land had been purchased by different timberlands investment structures *(Stein et al.; USFS)*
  - Timberland investment management organizations (TIMOs)
  - Real estate investment trusts (REITs)
- Timberlands must remain competitive against other asset classes

Intensification or Extensification?

- Spatial and temporal scope of operations
  - Fragmentation

- Practices vary by strategy

- Novel pressures

- Berger et al. 2013. *Journal of Forestry* 111: 139-153.
- Otto et al. 2013. *Forest Ecol. & Mgmt.* 304: 275-285.

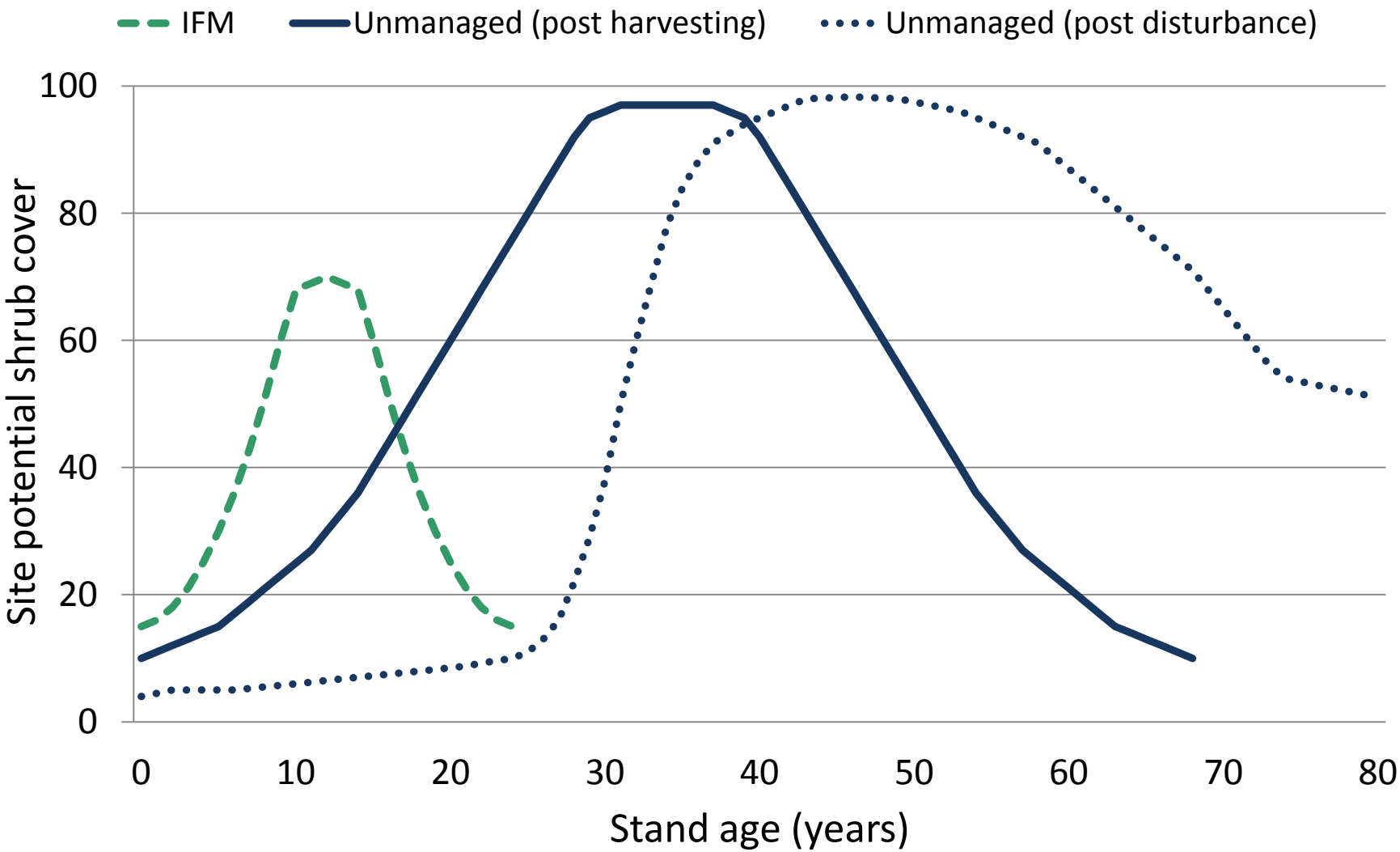
Landscape and Stand Changes

- Spatial distribution of ES stands
  - Strong contrasts with historic patterns
  - Landscape context varies *by ownership*
  - Elevational gradient *by ownership*

- Conversion of high productivity, low-elevation stands

- ES stand management
  - **Historic:** Passive regeneration, burning for site preparation, planting of unimproved stock
  - **Current:** Active regeneration, chemical site preparation, planting of improved stock

Intensification in ES Stands

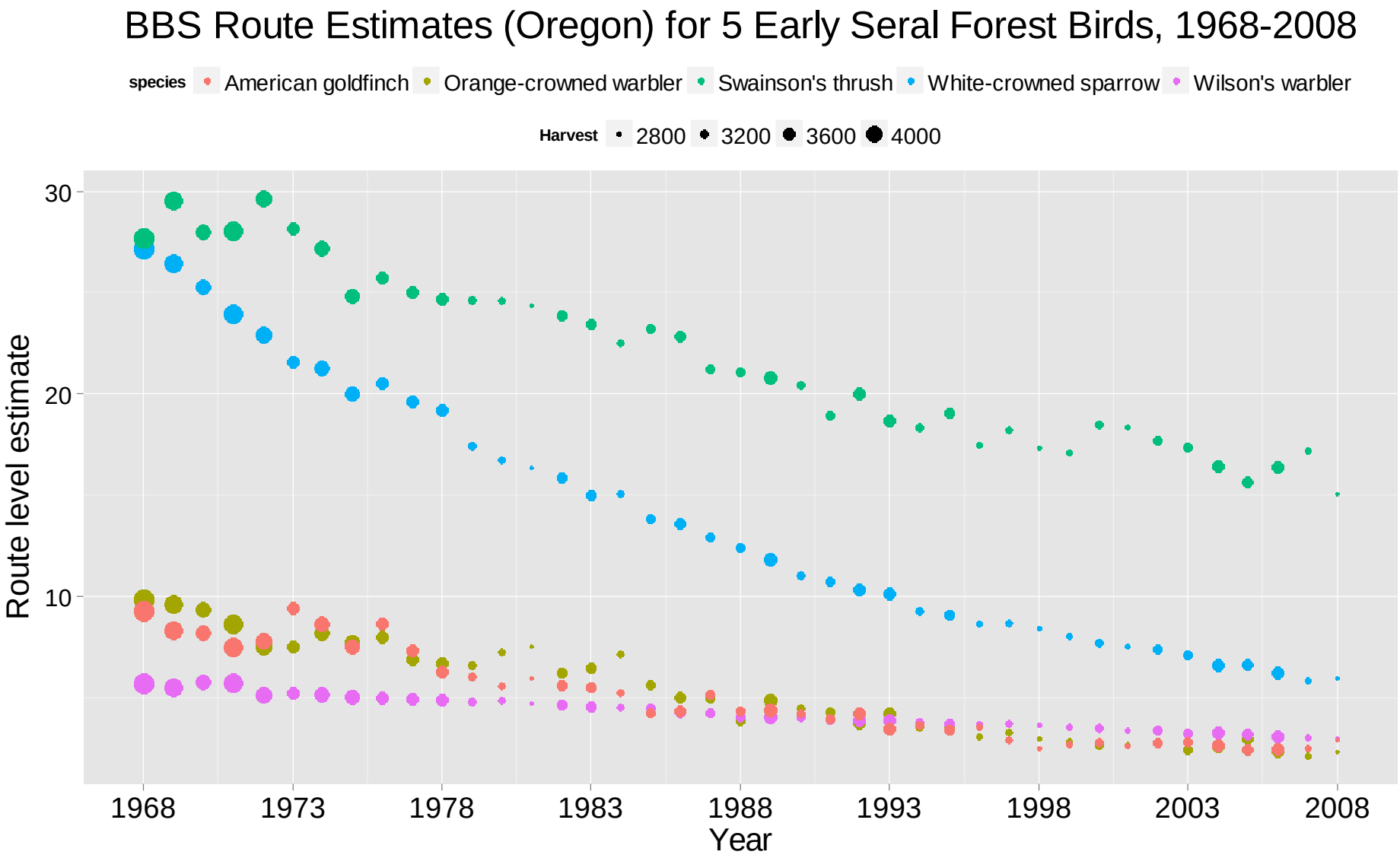


Issues in ES Stand Management

- Compressed ES stage
- Truncated stand ages
- Reduced structural complexity (spatial)
- Habitat may be reduced or eliminated for certain species
  - A ‘balance’ between ES and other species?

Identify Solutions

- Can ‘space’ be substituted for ‘time’ in ES stand management?
  - At what scales?
- Reduced structural complexity as a trade-off for intensification?
- Uniformity


BBS Route Estimates (Oregon) for 5 Early Seral Forest Birds, 1968-2008
species
American goldfinch
Orange-crowned warbler
Swainson's thrush
White-crowned sparrow
Wilson's warbler
Harvest
2800
3200
3600
4000
Route level estimate
30
20
10
1968
1973
1978
1983
1988
1993
1998
2003
2008
Year