

Small Area Estimation in Forest Inventory: Discussion

Speakers: Phil Radtke, George Gaines, Jerzy Wieczorek

Discussant: Grayson White

The Importance of Small Area Estimation for National Forest Inventories (NFIs)

- NFIs typically do not collect enough data for forest characteristics to have precise estimates through direct estimation in small areas or short timeframes.
- This leads to a variety of pitfalls, including the inability to support project decisions, recover salvage from forest fires accurately, inform policy decisions and much more.
- The recent progress made in remote sensing imagery and various auxiliary data sources has allowed for small area estimation techniques to thrive in these NFIs.

Phil:

What challenges do you see for
moving more hierarchical
Bayesian models into
production?

George:

In the specific case of fires, do you see temporal or spatial buffering to be more promising for estimation?

Jerzy:

What are the benefits and drawbacks of both simulation methods? Which could be applied more broadly?

Phil:

What do you see as the ideal
auxiliary data for small area
estimation of forest attributes?

George:

What are the most pressing needs for small area estimates in forest management and planning?

Jerzy:

How are FIA's small area estimation problems different to those you encountered at the US Census Bureau?

Questions from the audience?