Small Area Estimation in Forest Inventory: Discussion

Speakers: Phil Radtke, George Gaines, Jerzy Wieczorek

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SAE 2022: Small Area Estimation, Surveys and Data Science

University of Maryland, College Park, MD, USA

May 23, 2022

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

- NFI's 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?