



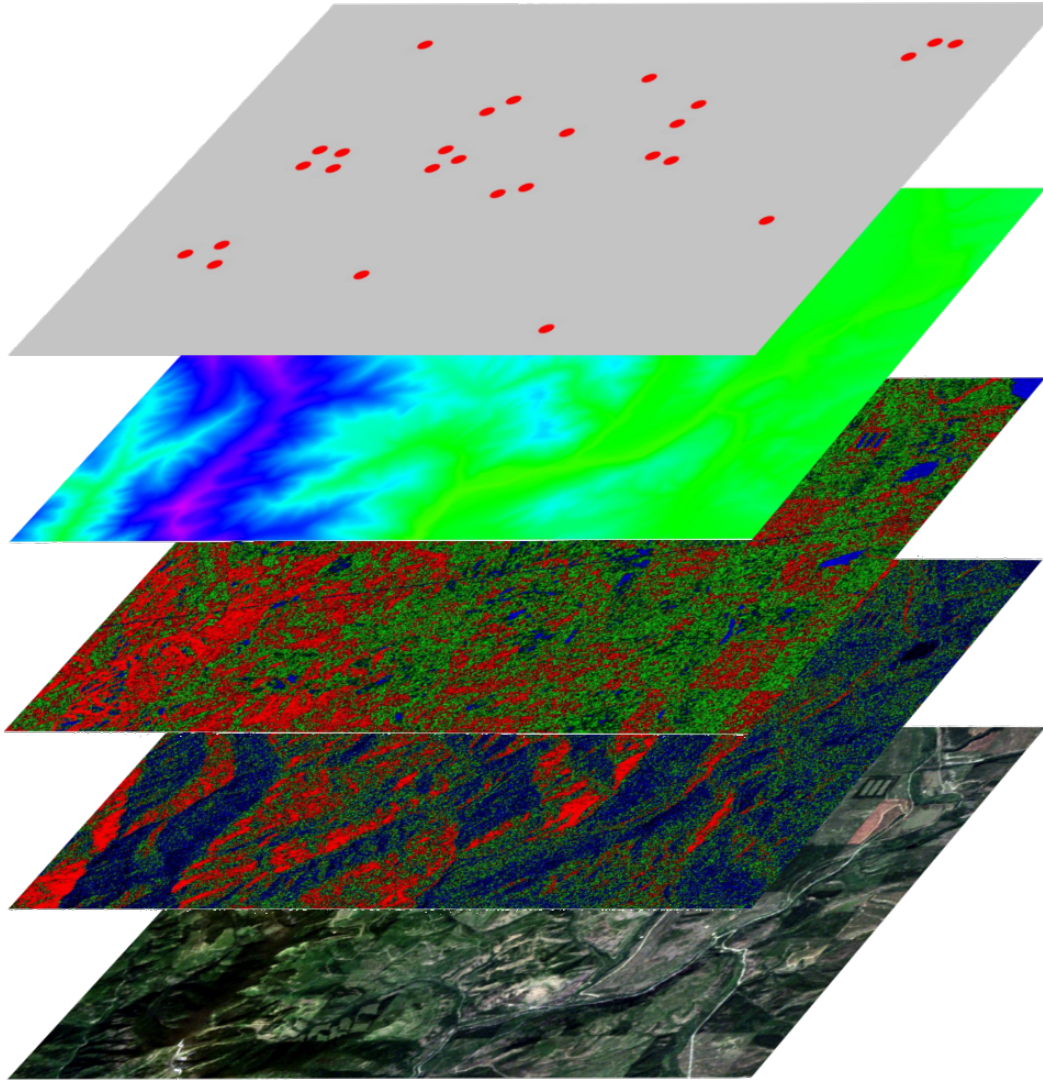
SilviaTerra

Managing Forest Data

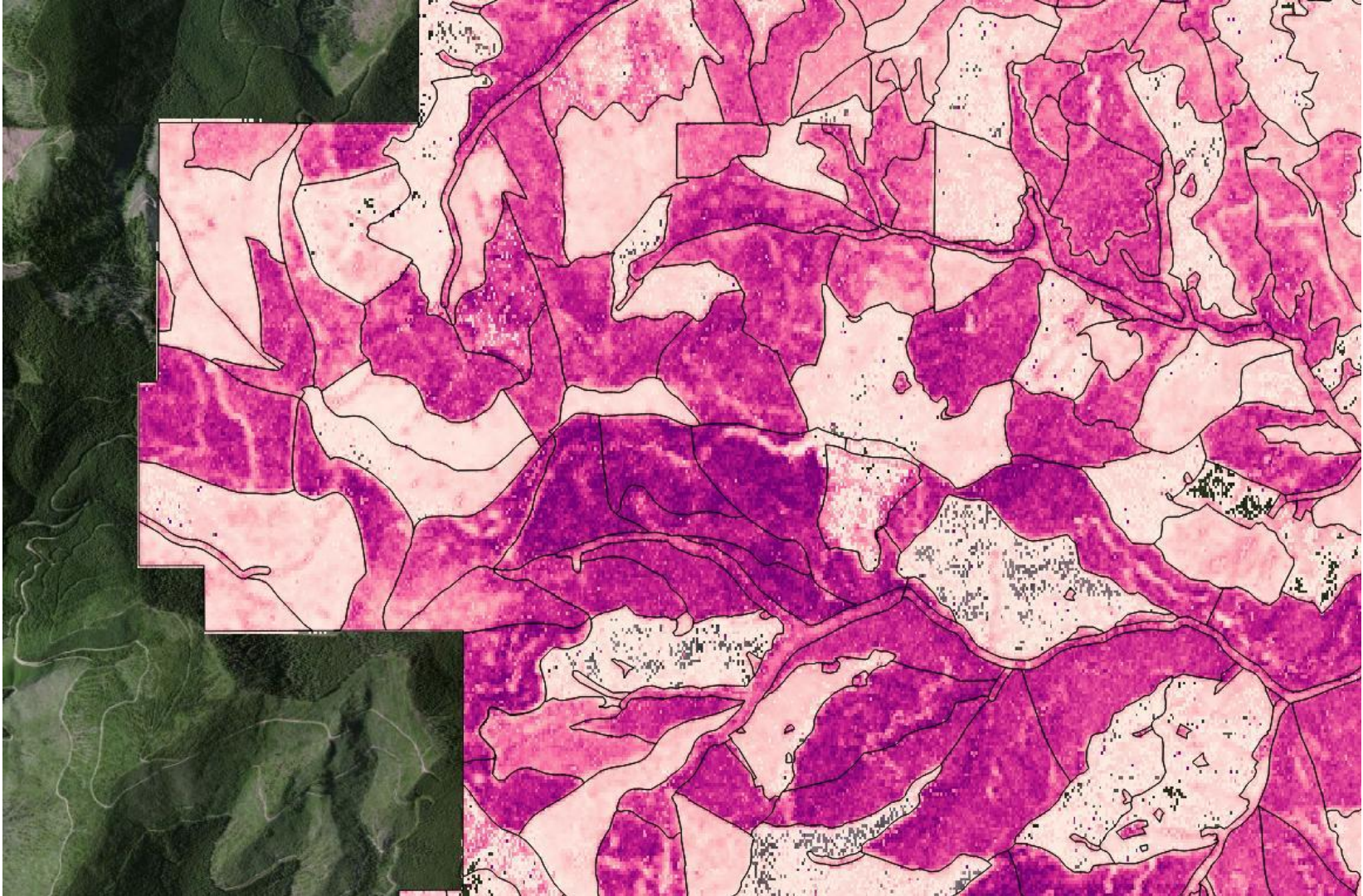
measurement, computation, and communication

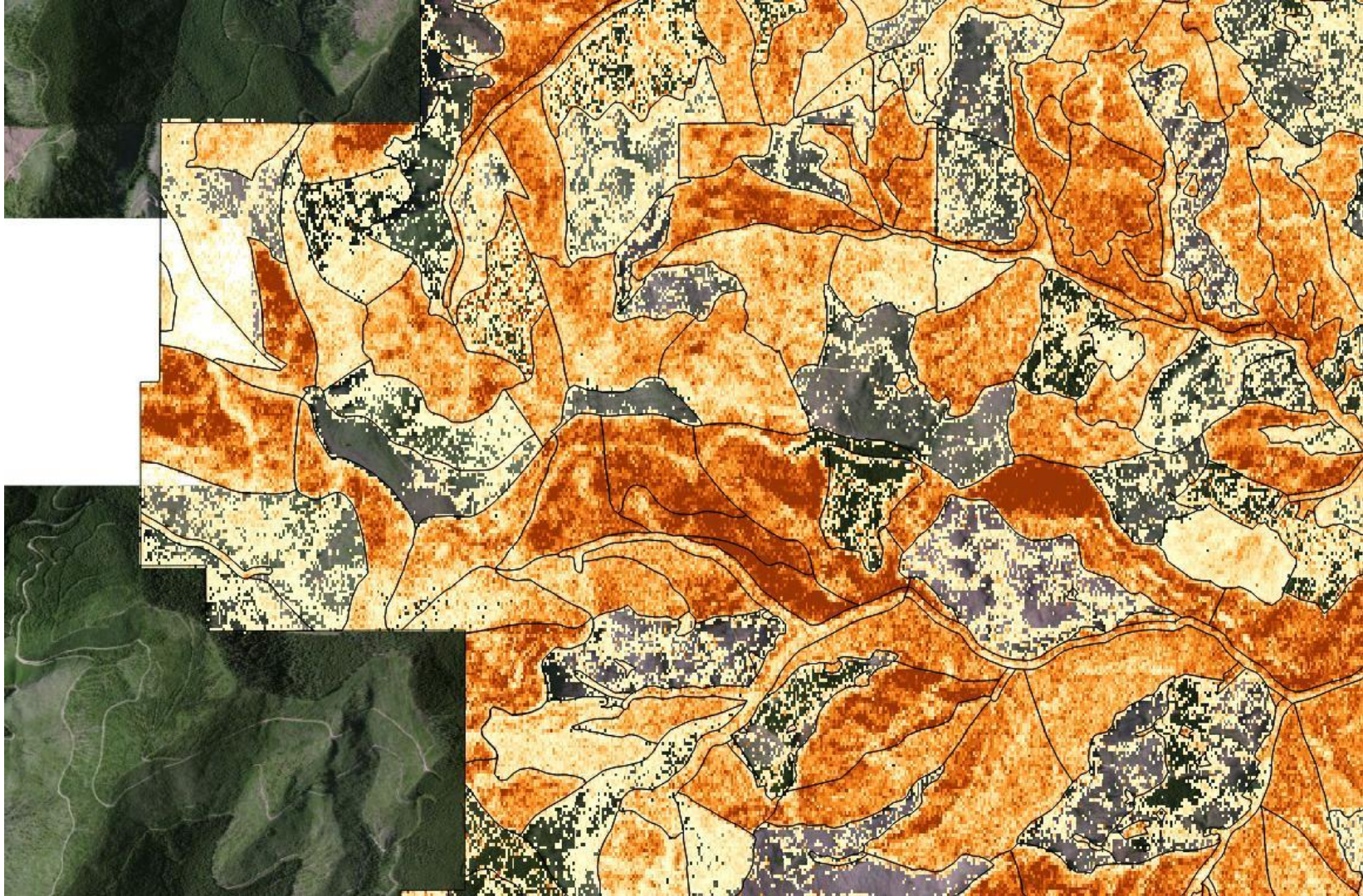
Zack Parisa
President, SilviaTerra

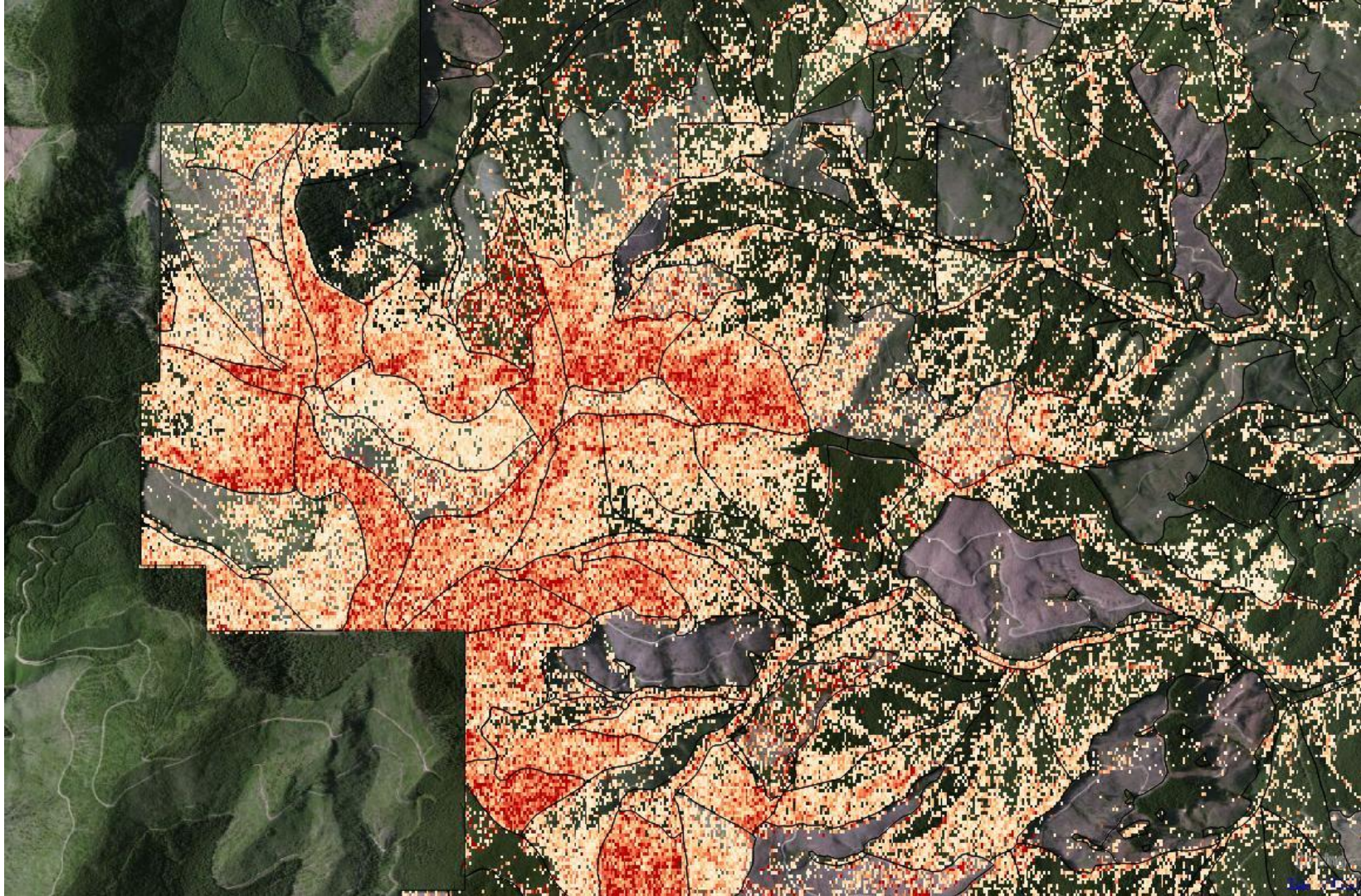
Michigan SAF - Spring 2015











PLOT HOUND



[← Back](#)

Cruise details

12 plots

Biltmore Estate Tract 001

(Transylvania, NC)

266 acres

12 plots

0% complete



Plot #1

3,231 ft.

Biltmore Estate Tract 001

(Transylvania, NC)

Assigned to **Paul Bunyan** No trees recorded



Plot #2

3,231 ft.

Biltmore Estate Tract 001

(Transylvania, NC)

Assigned to **Paul Bunyan** No trees recorded



Plot #3

3,231 ft.

Biltmore Estate Tract 001

(Transylvania, NC)

Assigned to **Paul Bunyan** No trees recorded



Plot #4

3,231 ft.

Biltmore Estate Tract 001

(Transylvania, NC)

Assigned to **Paul Bunyan** No trees recorded



Plot #5

3,231 ft.



< Back

Plot #1

☰ Add trees

Biltmore Estate Tract 001 cruise name

Distance to destination (feet)

716140

Heading

259° (W)

Accuracy (feet)

220

📍 Save GPS Location
Select once you arrive at plot.



📍 35.326368254016 -82.760043091947

📍 35.972724899999996 -78.9554631



Plot #1

Biltmore Estate Tract 001

Limiting Distance Calculator

Sampling method BAF 10	Plot notes
---	------------

1	Species black oak	Diameter (DBH) 11 inches	Total height	Merch. height	Grade	Flag <input type="checkbox"/>	more ▼
2	Species black oak	Diameter (DBH) 12 inches	Total height 44 feet	Merch. height 16 feet	Grade saw	Flag <input type="checkbox"/>	more ▼
3	Species chestnut oak	Diameter (DBH) 7 inches	Total height	Merch. height	Grade	Flag <input checked="" type="checkbox"/>	less ▲
		Age 20 years	Crown ratio 30%	Defects 1 defect	Tree notes		
4	Species	Diameter (DBH)	Total height	Merch. height	Grade	Flag <input type="checkbox"/>	more ▼

Edit trees

Complete plot

Drop plot



Demo Stand

created on Aug. 22, 2014
by Paul Bunyan

19 acres

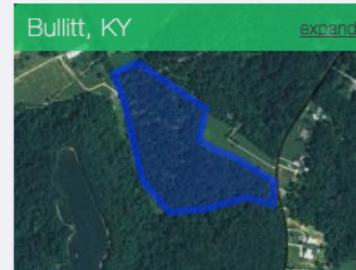
[+ add tag](#)

[Create Cruise](#)

[Download stand KML](#)

[Download stand SHP](#)

[Delete Stand](#)



Cruises

Demo Stand

Bullitt, KY

Started
8/22/14

Finished
8/22/14

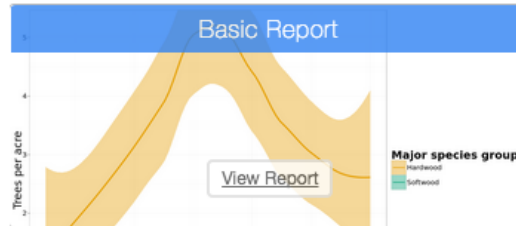
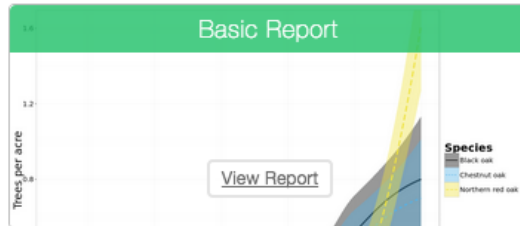
Cruised by
Paul...

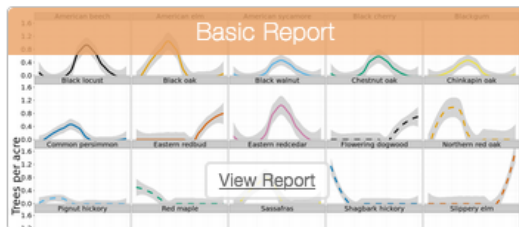
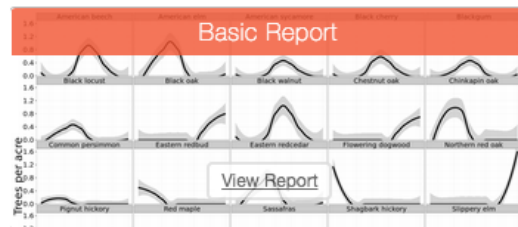
Acres Plots
19 34

TPA ? BA ? QMD ?
42 28 10.8

[Create check cruise](#)

[Delete Cruise](#)





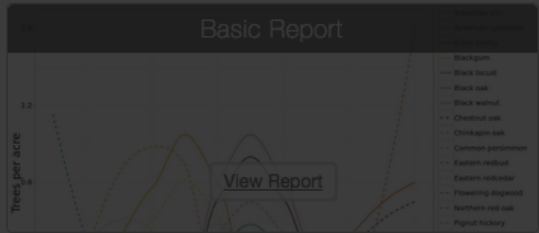
Click to download:

- [Basic Report](#)
- [Cruise Report](#)
- [Cruise KML](#)
- [Cruise SHP](#)
- [Cruise GPX](#)



Plot	Status	Collected	Cruiser	Sampling Method	Notes	Trees
1	completed	8/22/14	Paul... (+)	1/10 acre	n/a	4 (details)
2	completed	8/22/14	Paul... (+)	1/10 acre	n/a	8 (details)
3	completed	8/22/14	Paul... (+)	1/10 acre	n/a	8 (details)
4	completed	8/22/14	Paul... (+)	1/10 acre	n/a	8 (details)
5	completed	8/22/14	Paul... (+)	1/10 acre	n/a	1 (details)
6	completed	8/22/14	Paul... (+)	1/10 acre	n/a	3 (details)
7	completed	8/22/14	Paul... (+)	1/10 acre	n/a	7 (details)
8	completed	8/22/14	Paul... (+)	1/10 acre	n/a	5 (details)
9	completed	8/22/14	Paul... (+)	1/10 acre	n/a	no trees



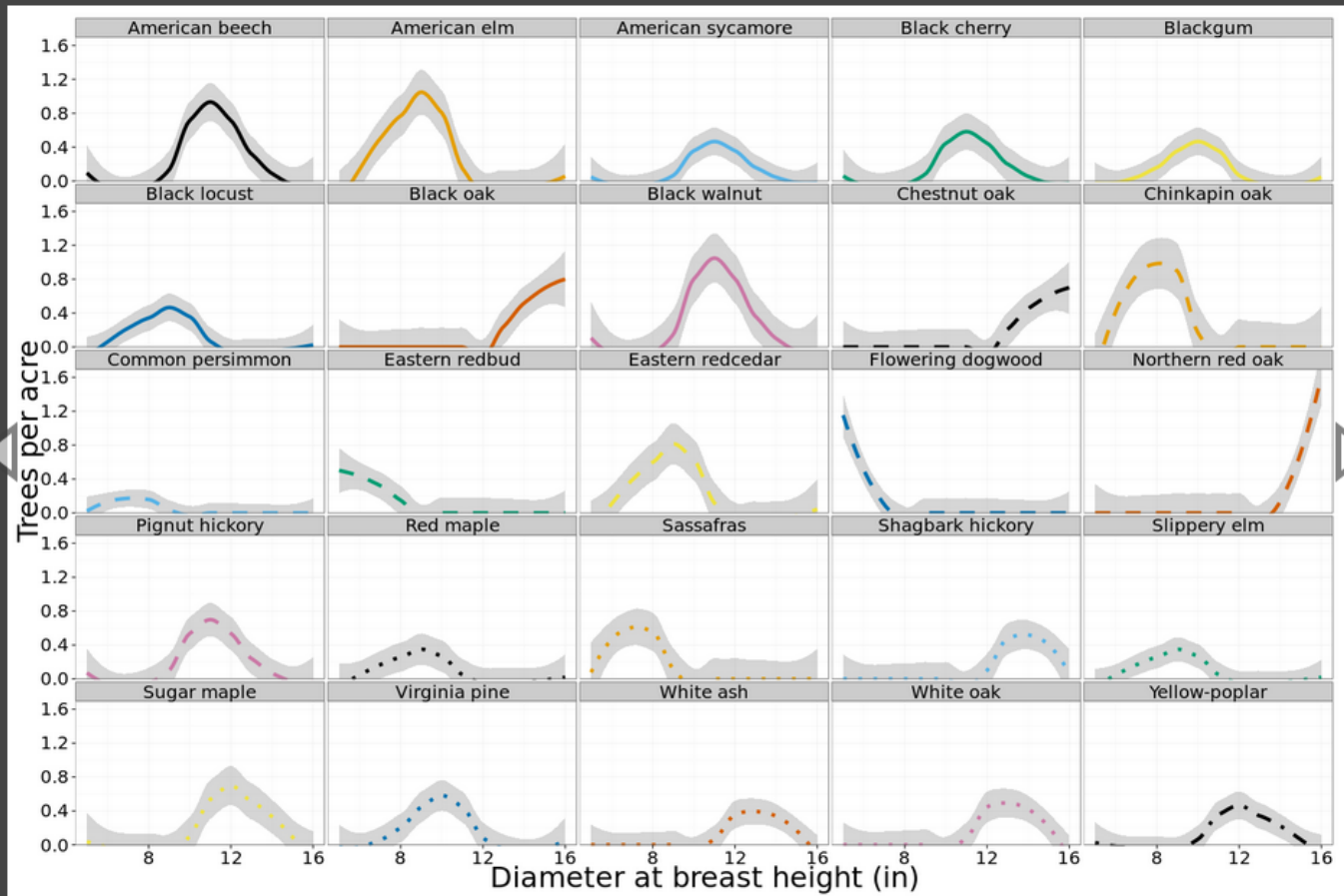


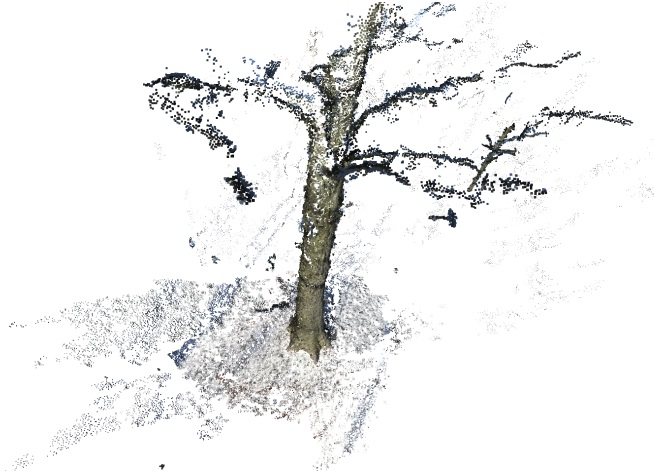
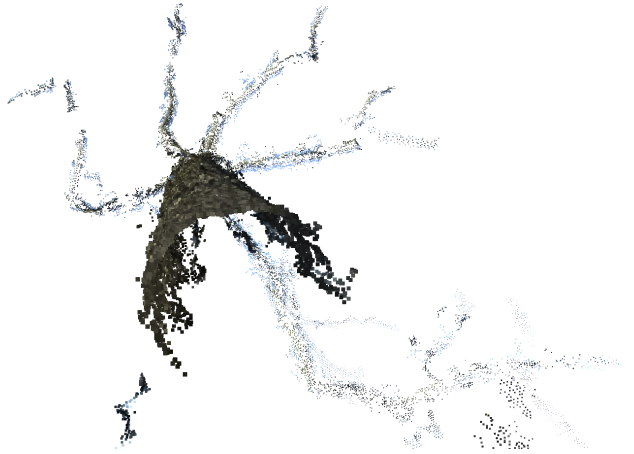
Plot	Status	Collected	Cruiser	Sampling Method	Notes	Trees
1	completed	8/22/14	Paul... ⬇	1/10 acre	n/a	4 (details)

Tree	Collected	Flagged	Species	Diameter	Merch. Ht.	Total Ht.	Grade	Age	Crown Ratio	Defects	Notes
1	8/22/14	no	black locust	9"	n/a	n/a	n/a	n/a	n/a	0	n/a
2	8/22/14	no	eastern redbud	6"	n/a	n/a	n/a	n/a	n/a	0	n/a
3	8/22/14	no	shagbark hickory	14"	n/a	n/a	n/a	n/a	n/a	0	n/a
4	8/22/14	no	black oak	15"	n/a	n/a	n/a	n/a	n/a	0	n/a

4	completed	8/22/14	Paul... ⬇	1/10 acre	n/a	8 (details)
5	completed	8/22/14	Paul... ⬇	1/10 acre	n/a	1 (details)
6	completed	8/22/14	Paul... ⬇	1/10 acre	n/a	3 (details)
7	completed	8/22/14	Paul... ⬇	1/10 acre	n/a	7 (details)
8	completed	8/22/14	Paul... ⬇	1/10 acre	n/a	5 (details)
9	completed	8/22/14	Paul... ⬇	1/10 acre	n/a	no trees
10	completed	8/22/14	Paul... ⬇	1/10 acre	n/a	2 (details)







This wasn't the plan.

I got into this by trying to solve my own problem (s).

And ended up focusing on building the things I wished existed.

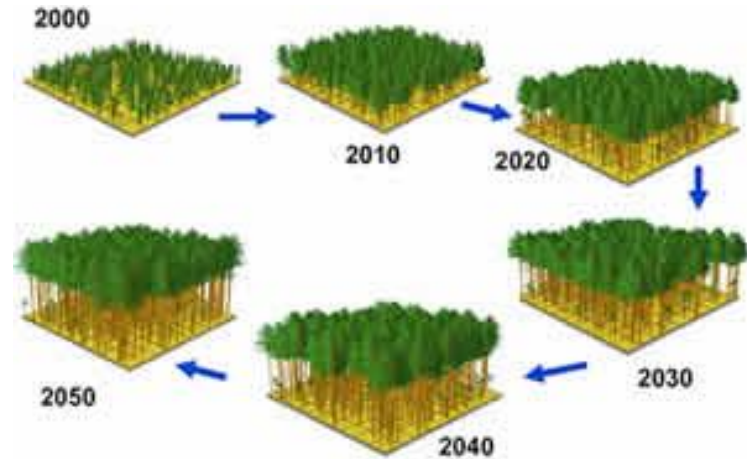
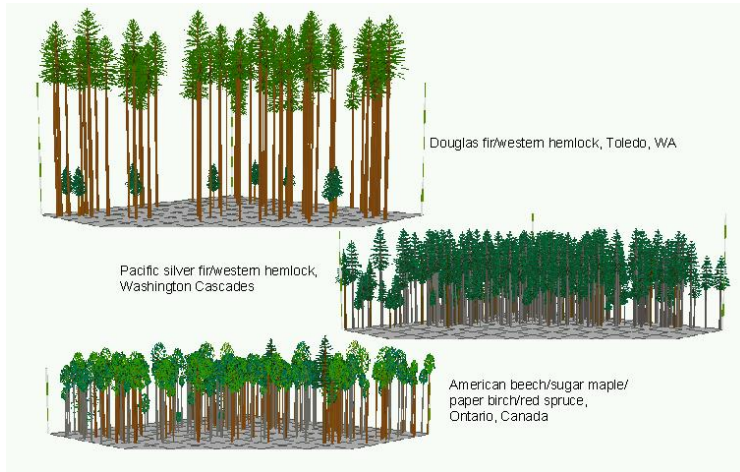


Because these are real problems

- rising costs,
- landowner changes,
- increased competition,
- environmental awareness and unawareness,
- market shifts in forest-derived products



A challenge as foresters is to make forest management **legible** to those who “own” the forest.



minimize the time to understand a forest - maximize your ability to communicate that information

Of the questions posed, I picked 2

1. Does it work? Is it cost-effective?
2. What factors have changed within the total chain? (and what does that mean for how we practice)



Does it work? Is it cost-effective?



- 1) Does it save me time?
(where time=money)
- 2) Does it increase the
quality of my product?



Does it work?

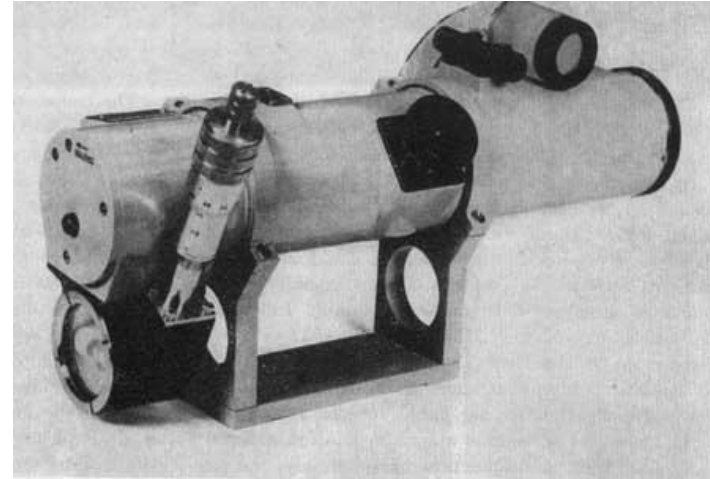


Real cost

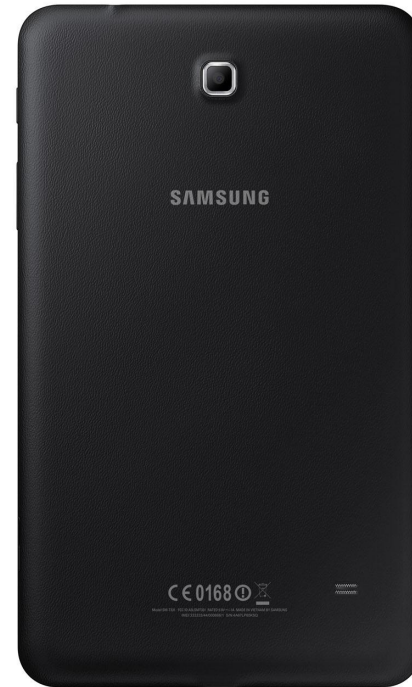
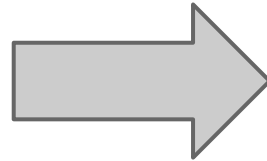
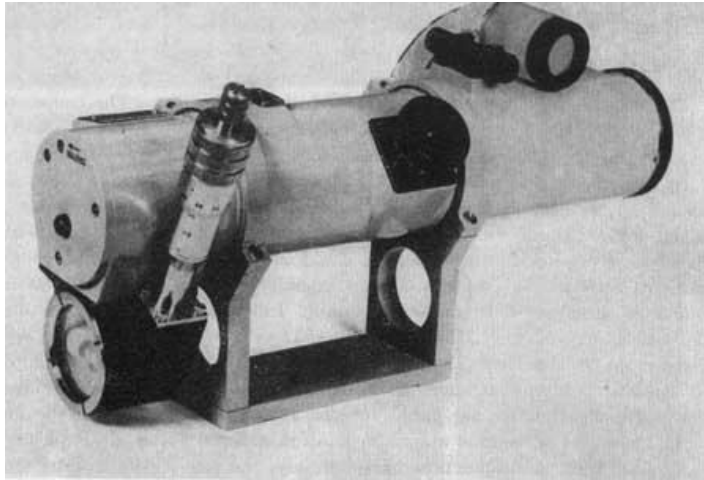
- what do you pay?
- what skills do you have to learn?
- what frustrations do you have to endure?
- vs. your next best alternative
- avoiding thinking about sunk costs..



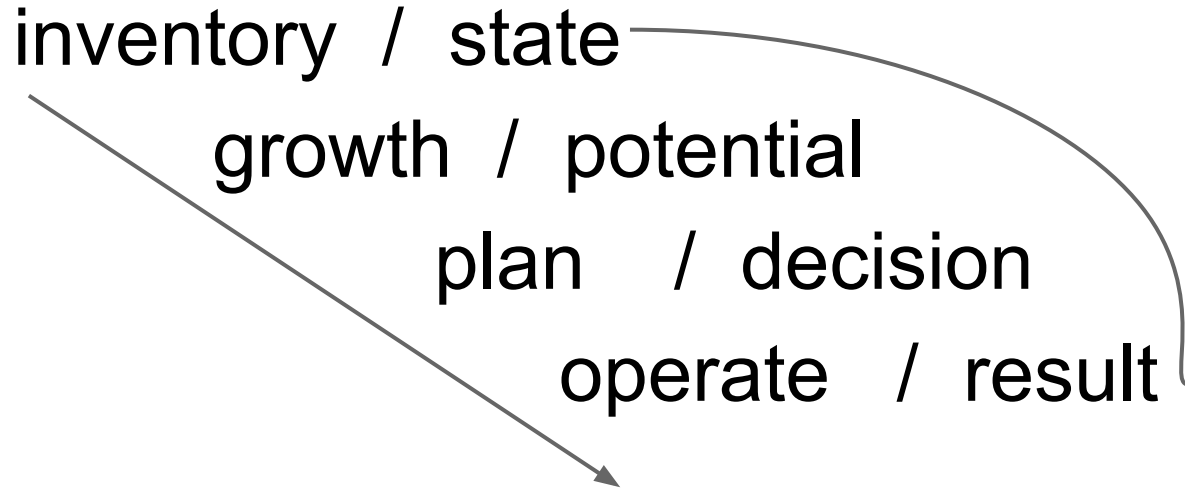
A tale of two technologies



but given a bit of time...



What factors have changed within the total chain?

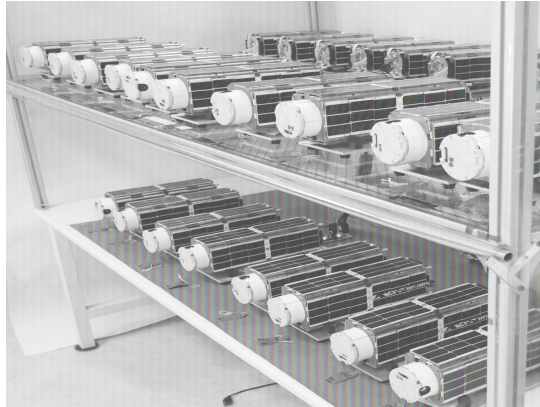


Factors have not changed, the context has.



The real trends

- measurements cost less
- computation is cheaper and better
- communication is getting ... better?



The real trends

- measurements cost less
- computation is cheaper and better
- communication is getting ... better?



No picture
necessary



The real trends

- measurements cost less
- computation is cheaper and better
- communication is getting ... better?

because having data and making insights from data are different things.



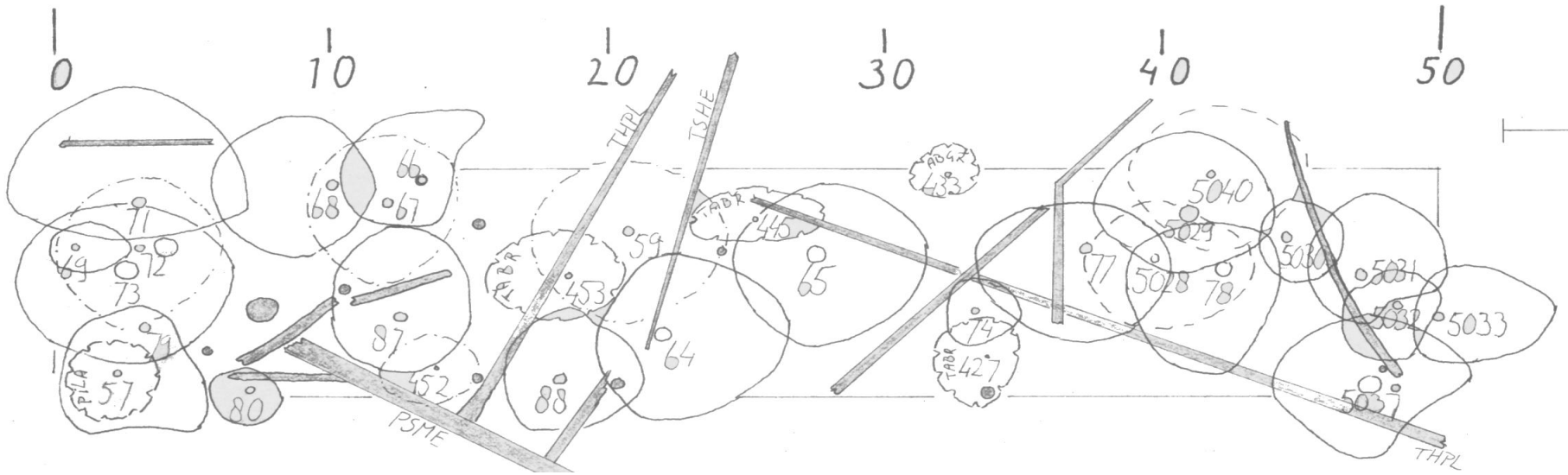
For us, in practice this means

- 1) Simplify cruising = Plot Hound
- 2) Extend the use of plot data = Plot Reduce
- 3) Fluid communication tools = information available anywhere.

And listening.



Questions?



If you think of any later, feel free to email me:
zack@silviaterra.com



“The book of nature is like a page written over or printed upon with different-sized characters and in many different languages, interlined and cross-lined, and with a great variety of marginal notes and references. There is coarse print and fine print; there are obscure signs and hieroglyphics. We all read the large type more or less appreciatively, but only the students and lovers of nature read the fine lines and the footnotes. It is a book which he reads best who goes most slowly or even tarries long by the way. He who runs may read some things. We may take in the general features of sky, plain, and river from the express train, but only the pedestrian, the saunterer, with eyes in his head and love in his heart, turns every leaf and peruses every line”

John Burroughs, The Art of Seeing

