Proposal for extracting species names for US 6-site community phylogeny

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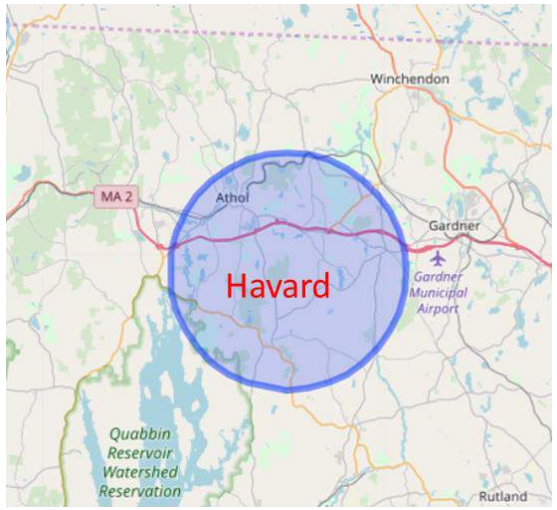
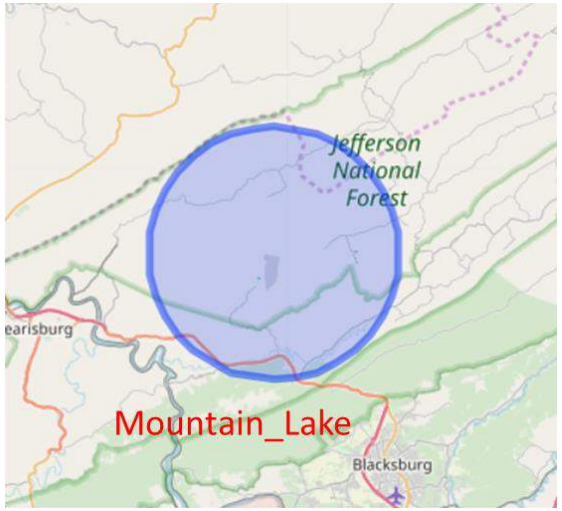
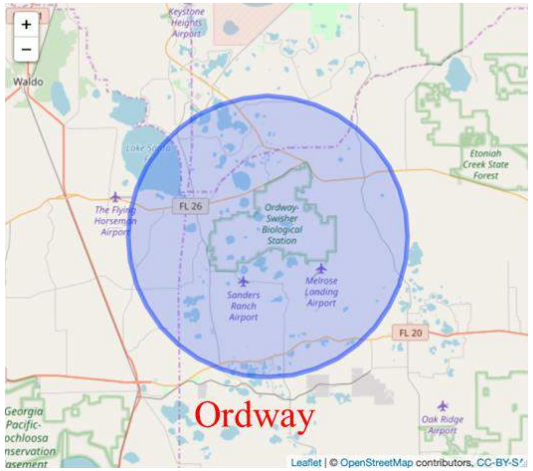
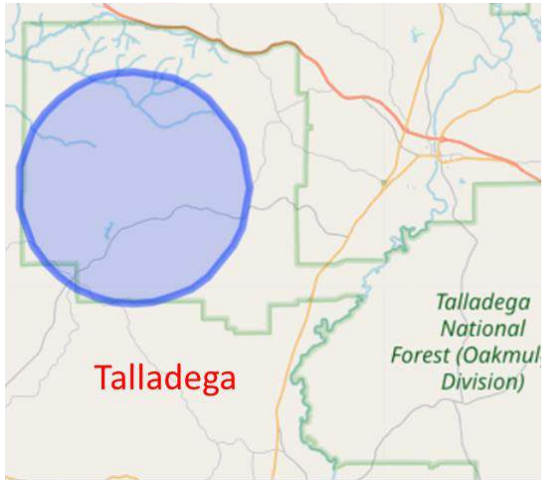
Recap:

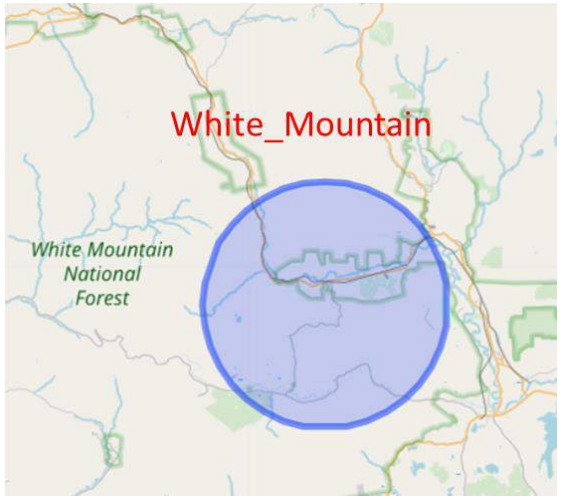
What I did earlier is using Centered coordinated of each site making a 10-km radius ring and then extract Seed plant accepted names from iDigBio + GBIF + Mark's original species list











General information for US-CN 11 site in total

Site	Area (km²)	Elevation	ntaxa	ntaxa_update	Latitute(°)	Longitude(°
White_Mountain	15.66	232	214	254	44.06388	-71.28731
Havard	49	351	800	897	42.5369	-72.17266
Mountain_Lake	12.6	1160	296	381	37.375654	-80.52214
Coweeta	16.26	914	583	681	35.052555	-83.45086
Talladega	53	135	349	533	32.923284	-87.4203
Ordway	38.44	45	632	749	29.68927	-81.99343
Changbai	1907.81	2744	1141	1140	42.42	128
Dongling	60	2303	773	773	40.06	115.50
Shennong	704.67	3106	1559	1559	31.61	110.31
Tianmu	43	1505	1188	1188	30.42	119.44
Gutian	81.07	1258	1209	1209	29.30	118.13

Note: the species number were generate by previous Miao's 10-km radius ring approach, not current; ignore.

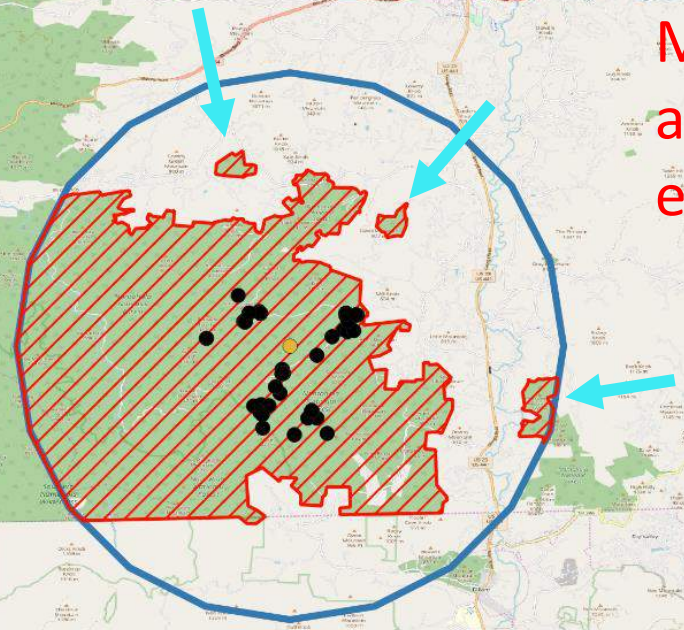
Our new approach:

- Project tree species sampling coordinates for each of 6 sites (black dots in the map)
- Make a dark blue ring using centered coordinates (yellow dot) of each site with 10-km radius (Miao's earlier approach); All the rings in the map are in the same size, the visual difference is caused by scale.
- The red shed area is vectorized national forests range (or part; depends on it's relation with samples geocode and 10km-radius ring)
- Then based on these spatial relationships, We proposed one potential polygon; then we use this polygon to extract those species names as our target for community phylogeny.

Please make your comments and suggestions.

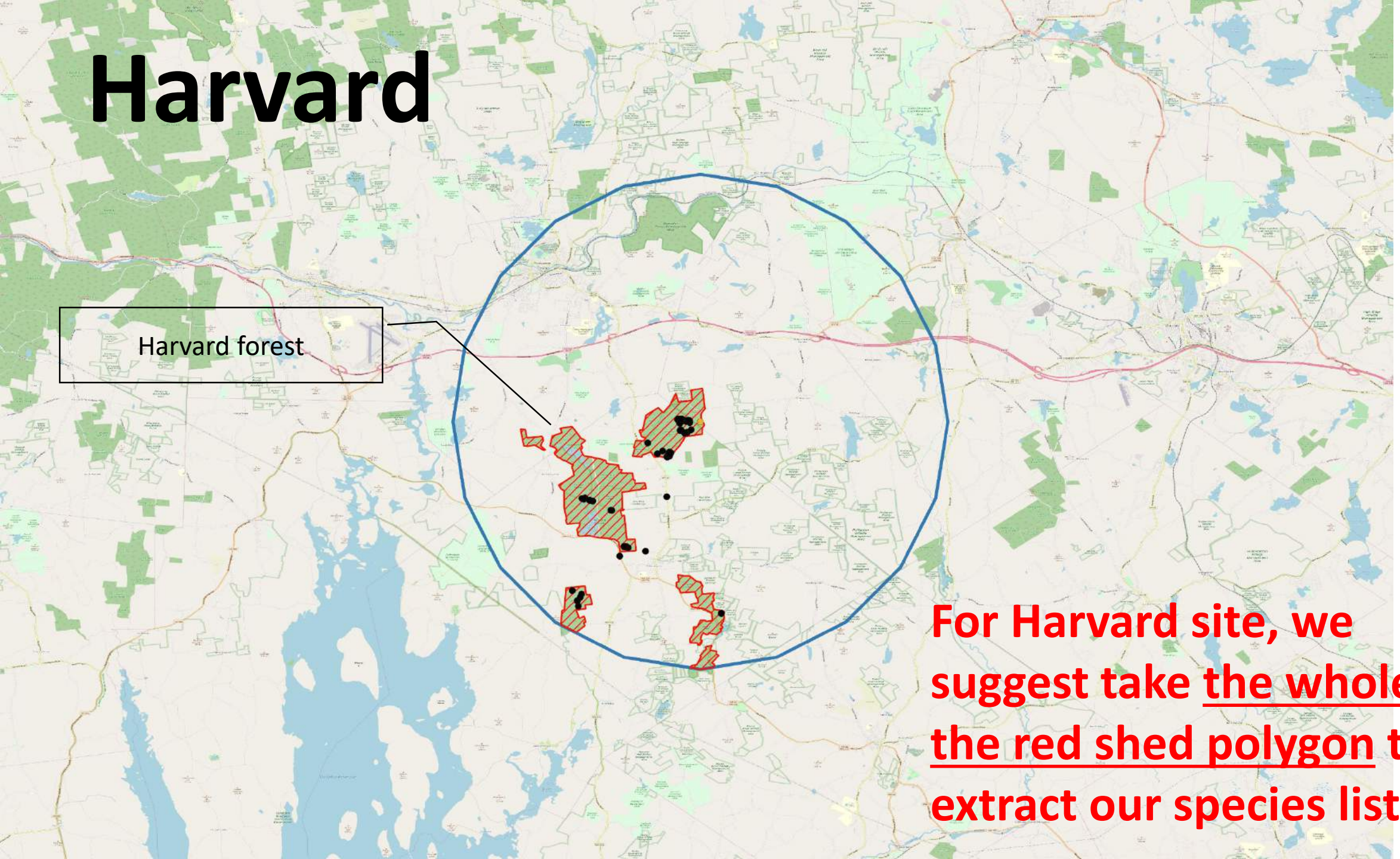
Coweeta

For Coweeta site, we suggest go with the red shed polygon to extract our species list.



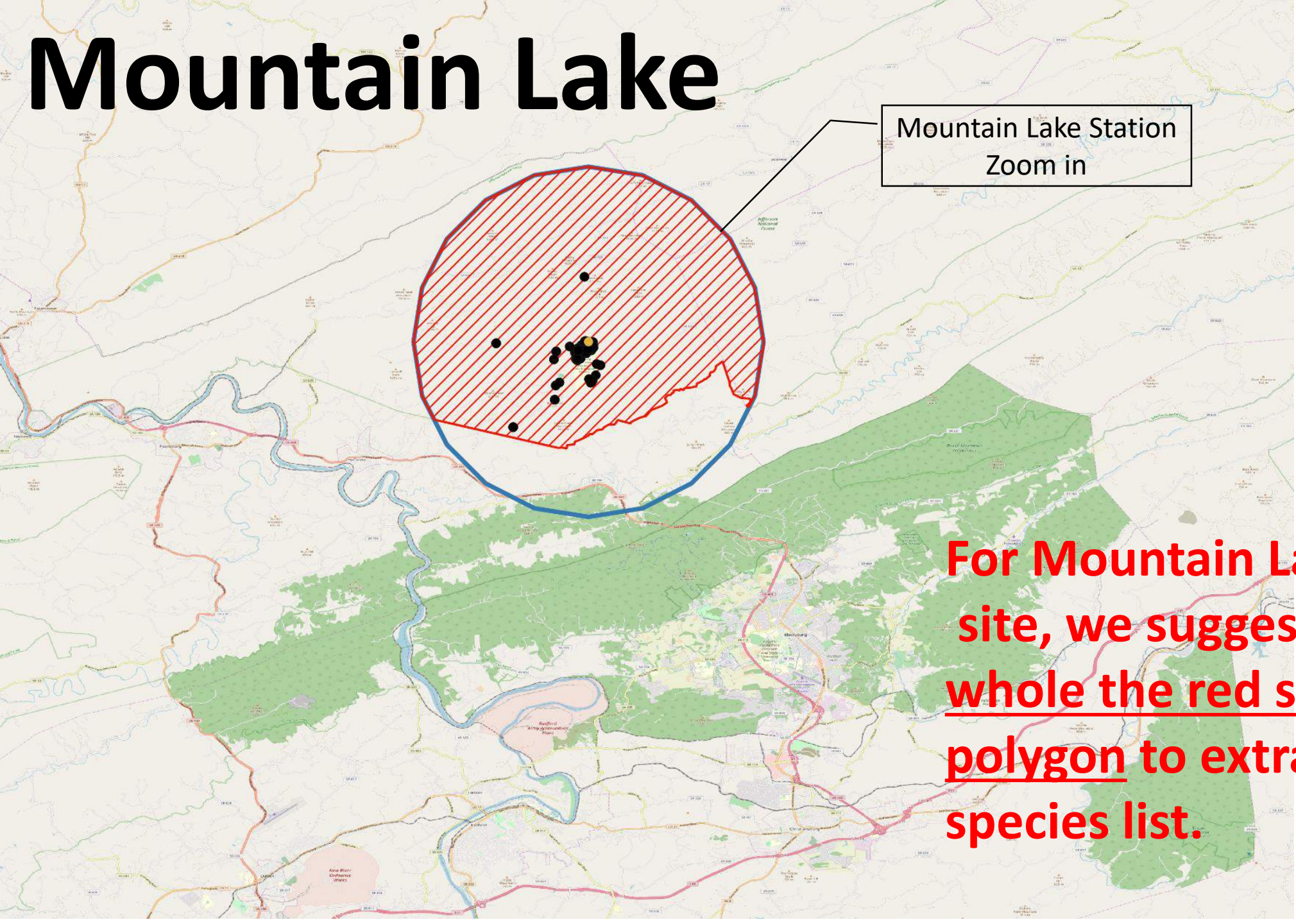
Maybe excluding those tiny small areas (skyblue arrow) on the edge

Harvard



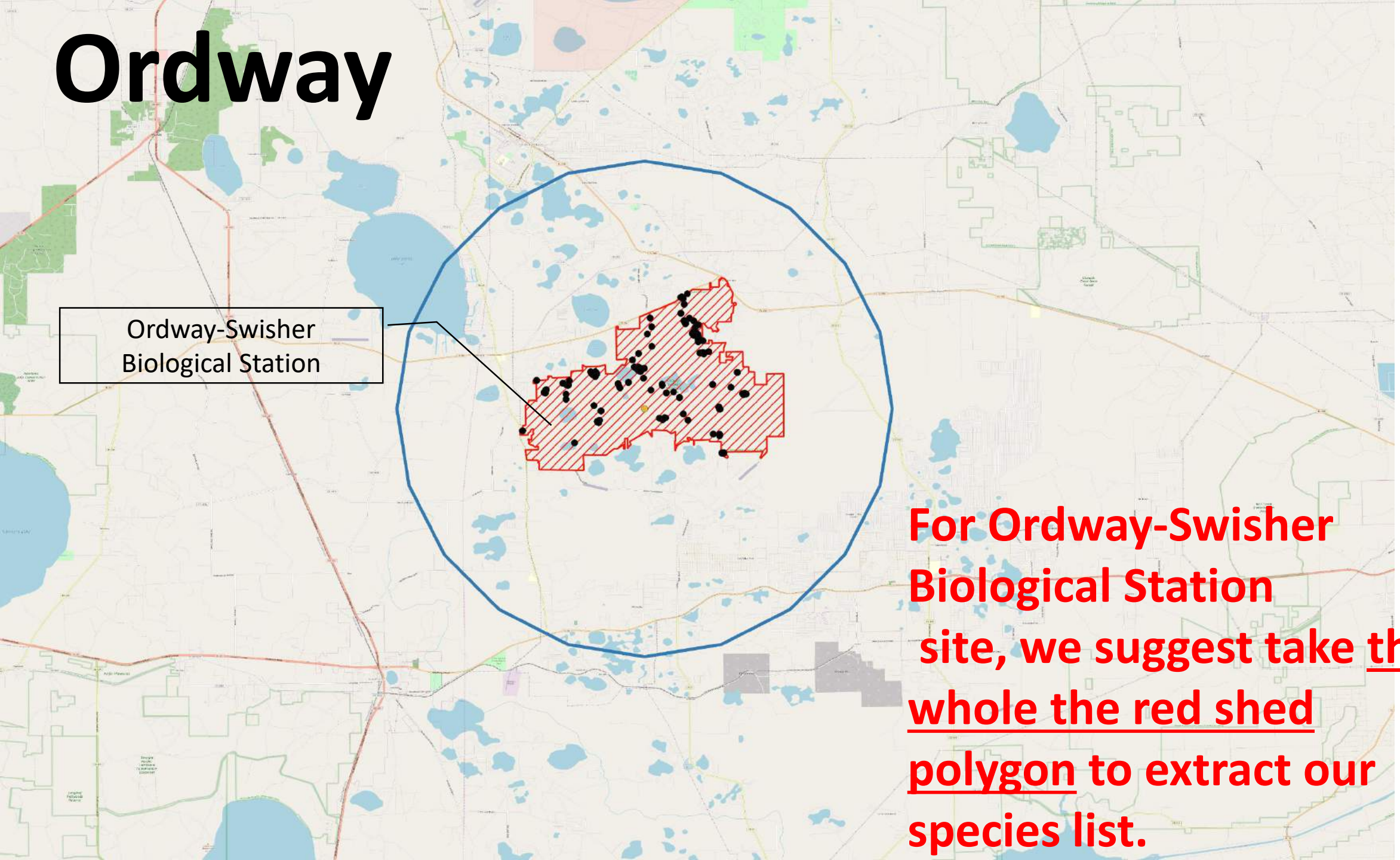
For Harvard site, we suggest take the whole the red shed polygon to extract our species list.

Mountain Lake



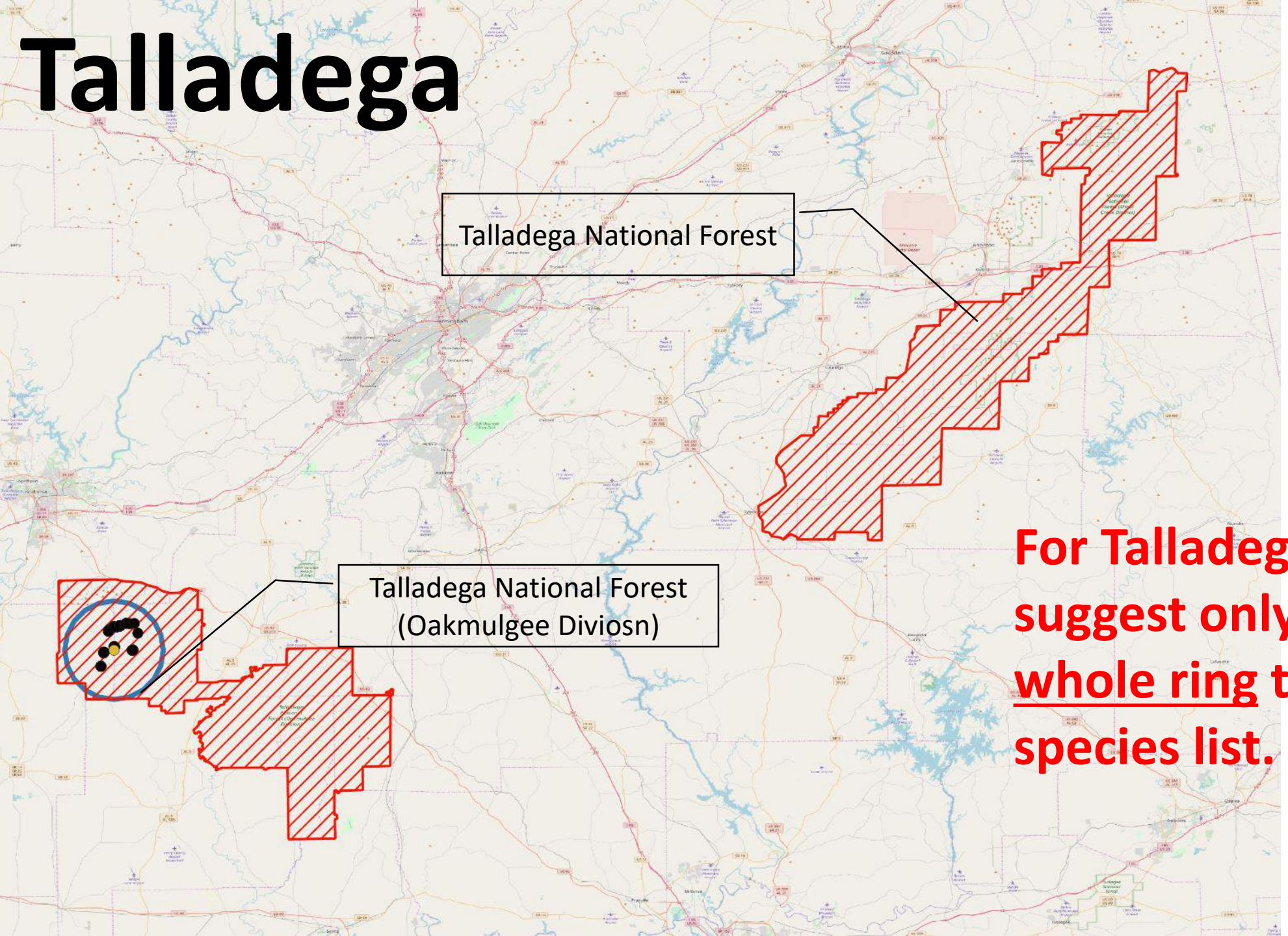
For Mountain Lake site, we suggest take the whole the red shed polygon to extract our species list.

Ordway



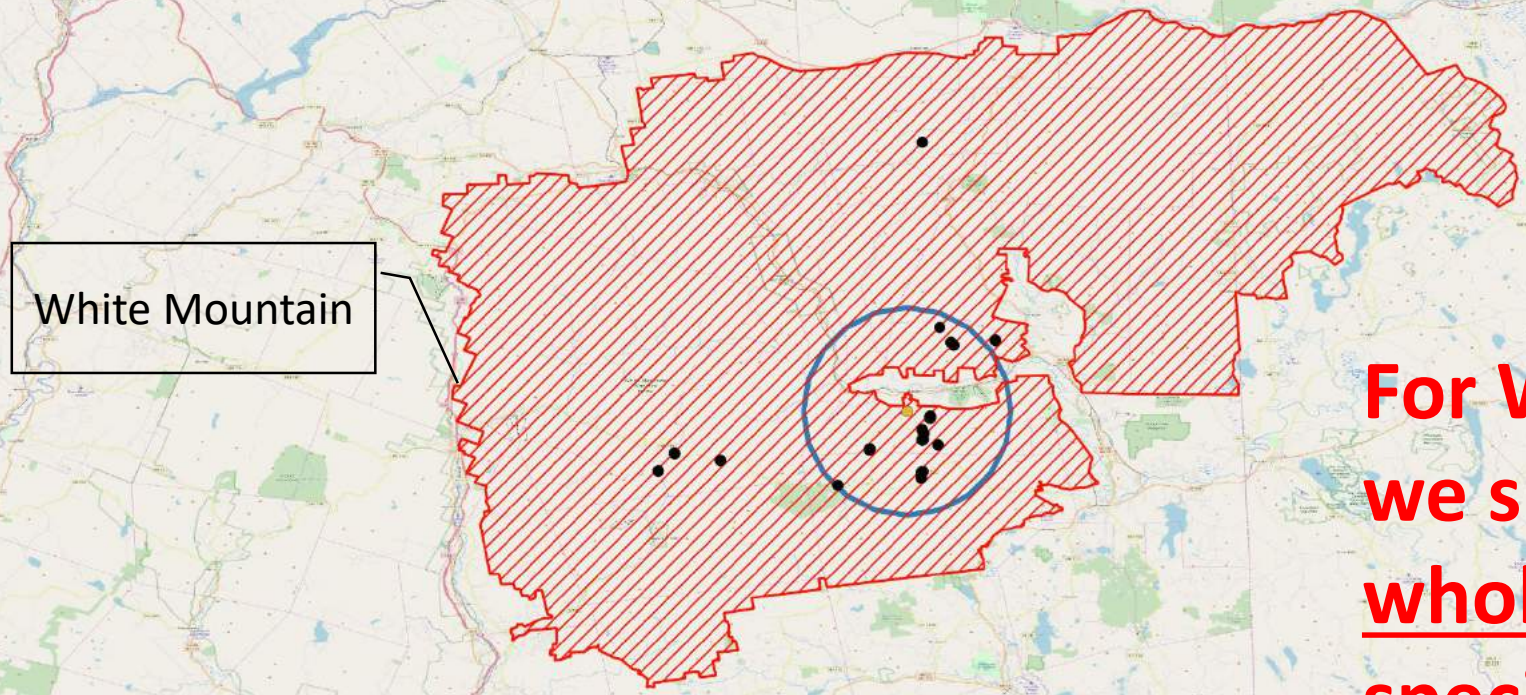
For Ordway-Swisher Biological Station site, we suggest take the whole the red shed polygon to extract our species list.

Talladega



For Talladega site, we suggest only take the whole ring to extract our species list.

White Mountain



For White Mountain site, we suggest only take <u>the whole ring</u> to extract our species list? Or move the ring inside 5km?

Concern is the non-station space in the center.