A strategy for the integrated control of *Cytisus scoparius* at Mima Mounds Natural Area Preserve

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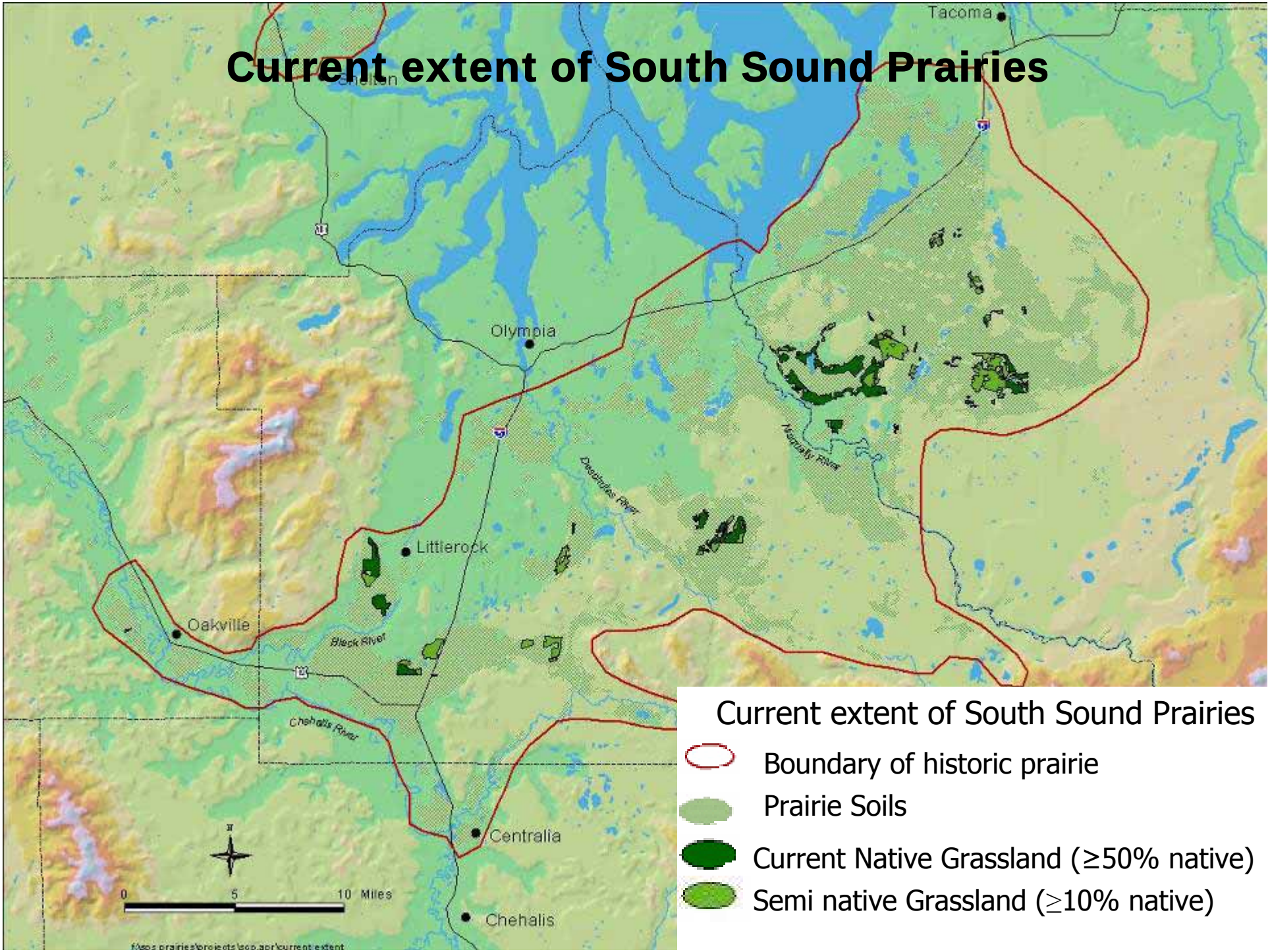
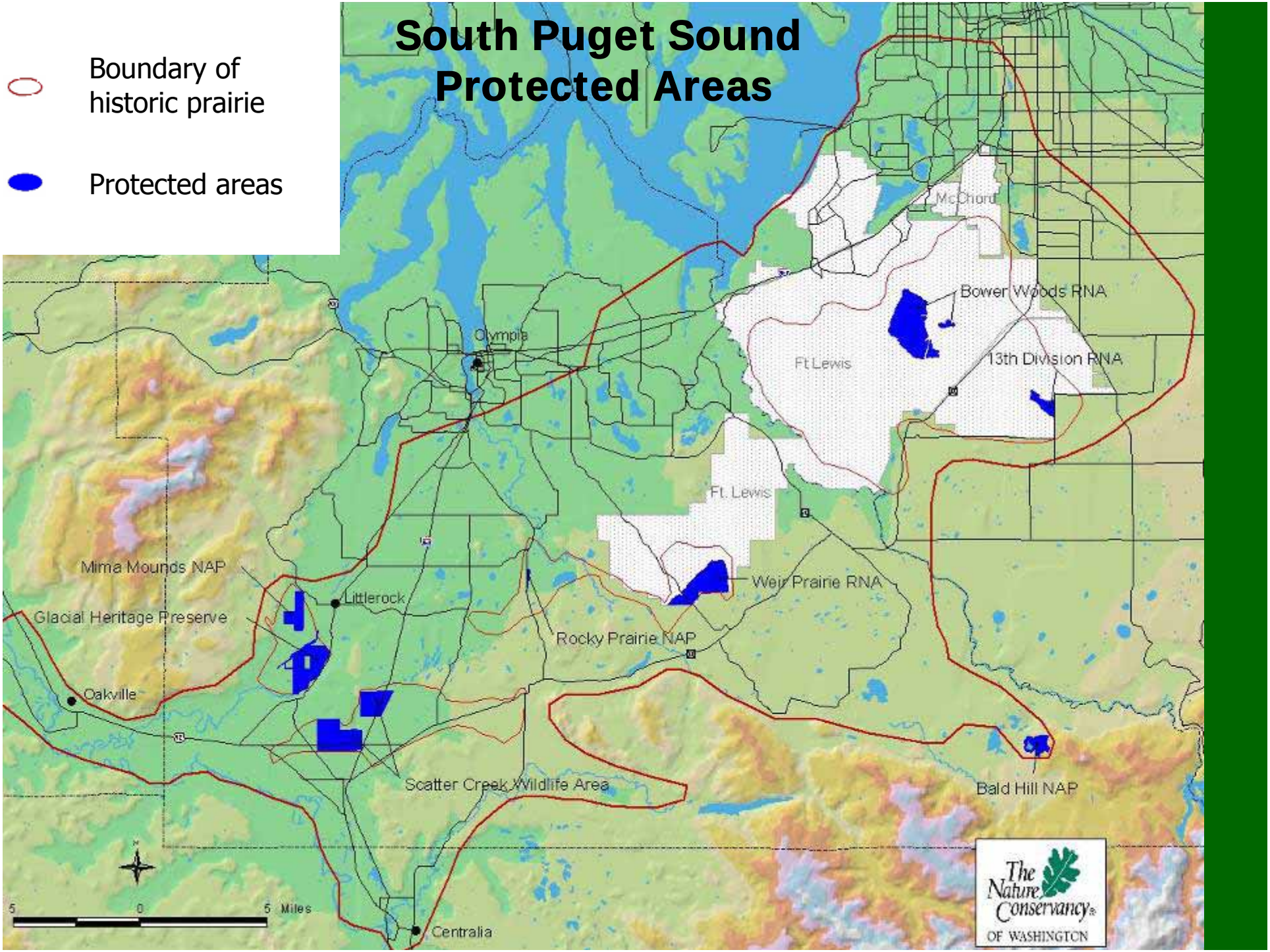
The Nature Conservancy
SAVING THE LAST GREAT PLACES ON EARTH

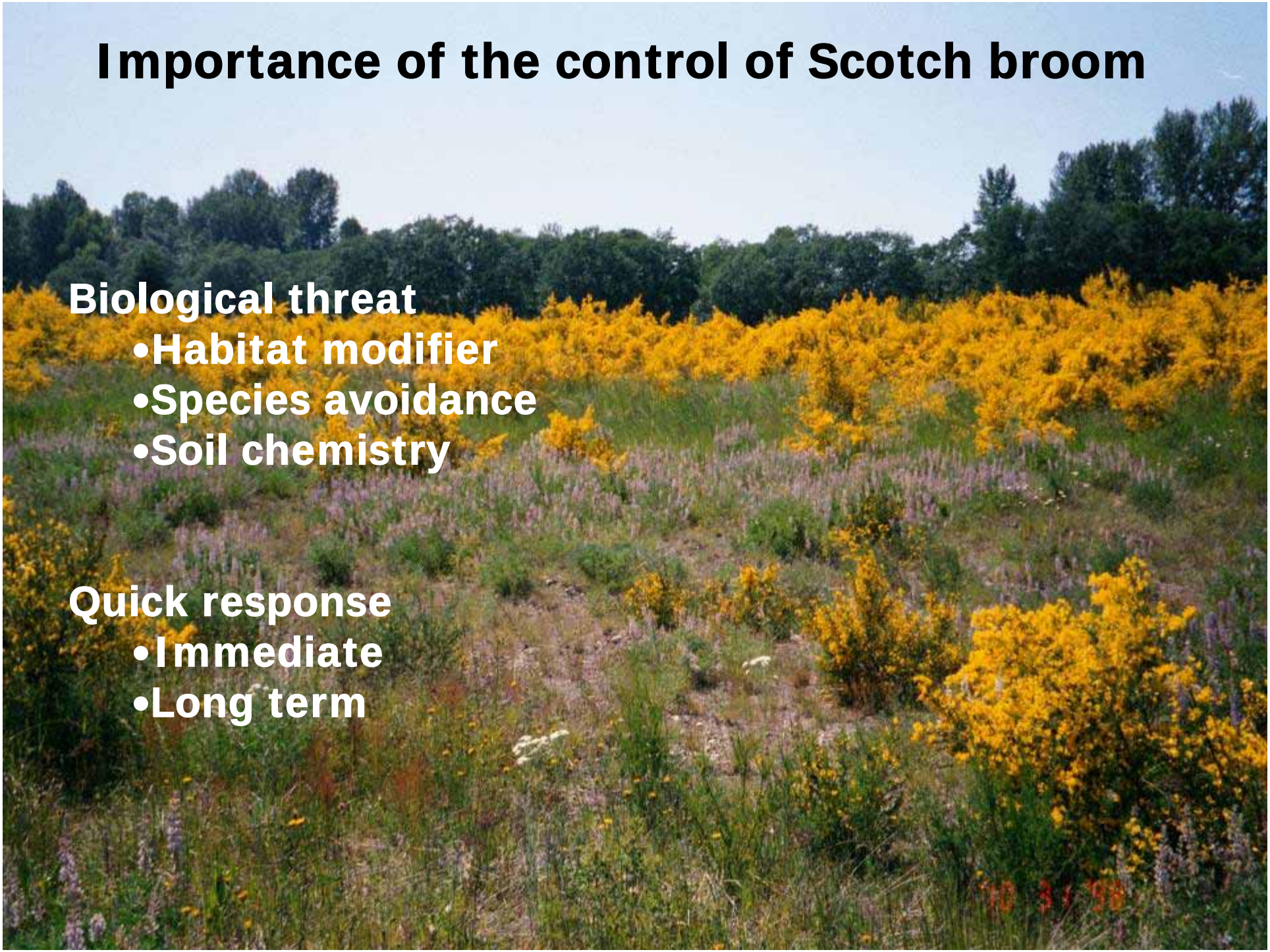
Current extent of South Sound Prairies



South Puget Sound Protected Areas



Importance of the control of Scotch broom



Biological threat

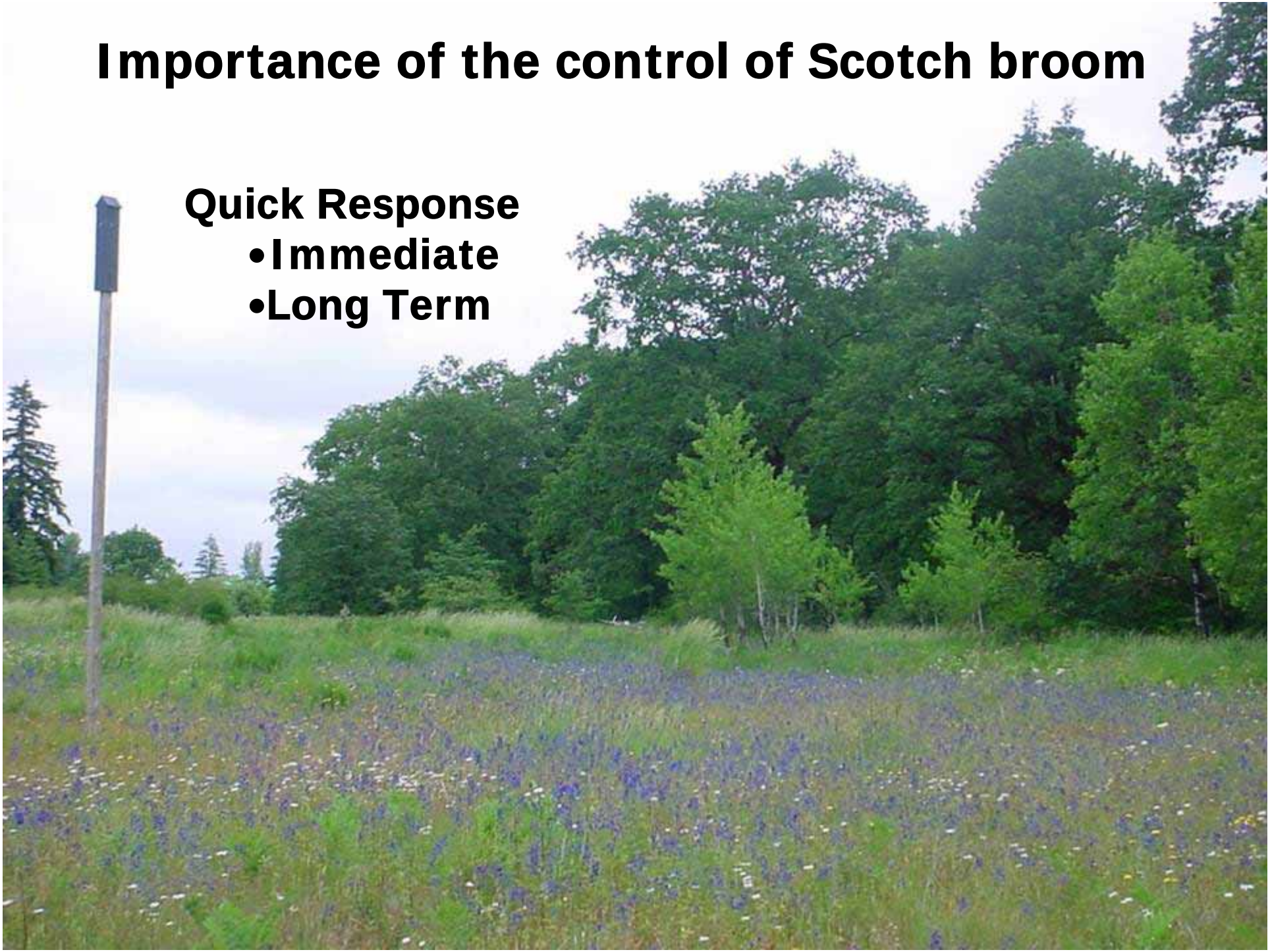
- **Habitat modifier**
- **Species avoidance**
- **Soil chemistry**

Quick response

- **Immediate**
- **Long term**

Importance of the control of Scotch broom

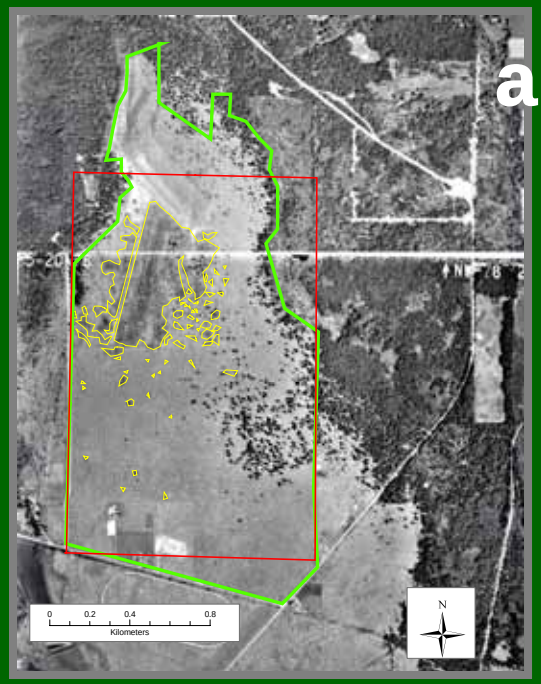
Importance of the control of Scotch broom



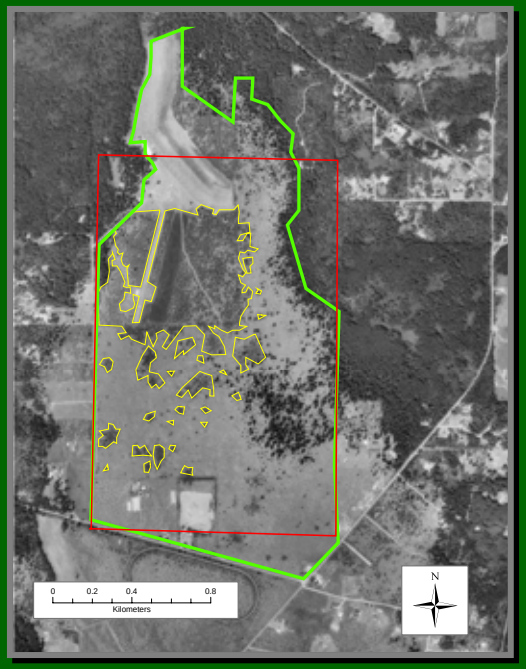
Quick Response

- **Immediate**
- **Long Term**

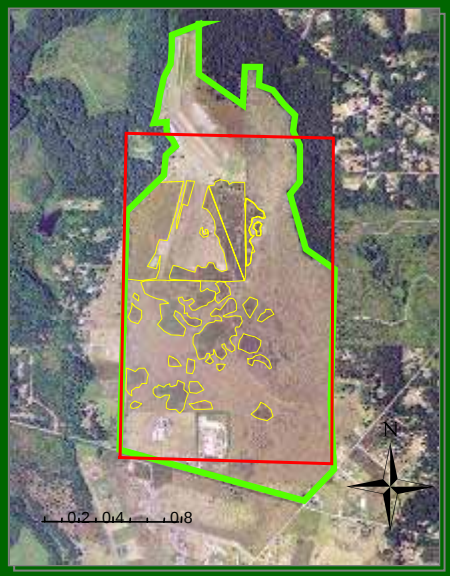
History of Scotch broom invasion at Mima Mounds NAP



1978



1990



2003

Scotch Broom pre-treatment

Integrated control of Scotch broom at Mima Mounds

Objective:

1. Short term control
2. "Eradication" from site

Integrated control of Scotch broom at Mima Mounds

Strategy:

Apply a range of control methods:

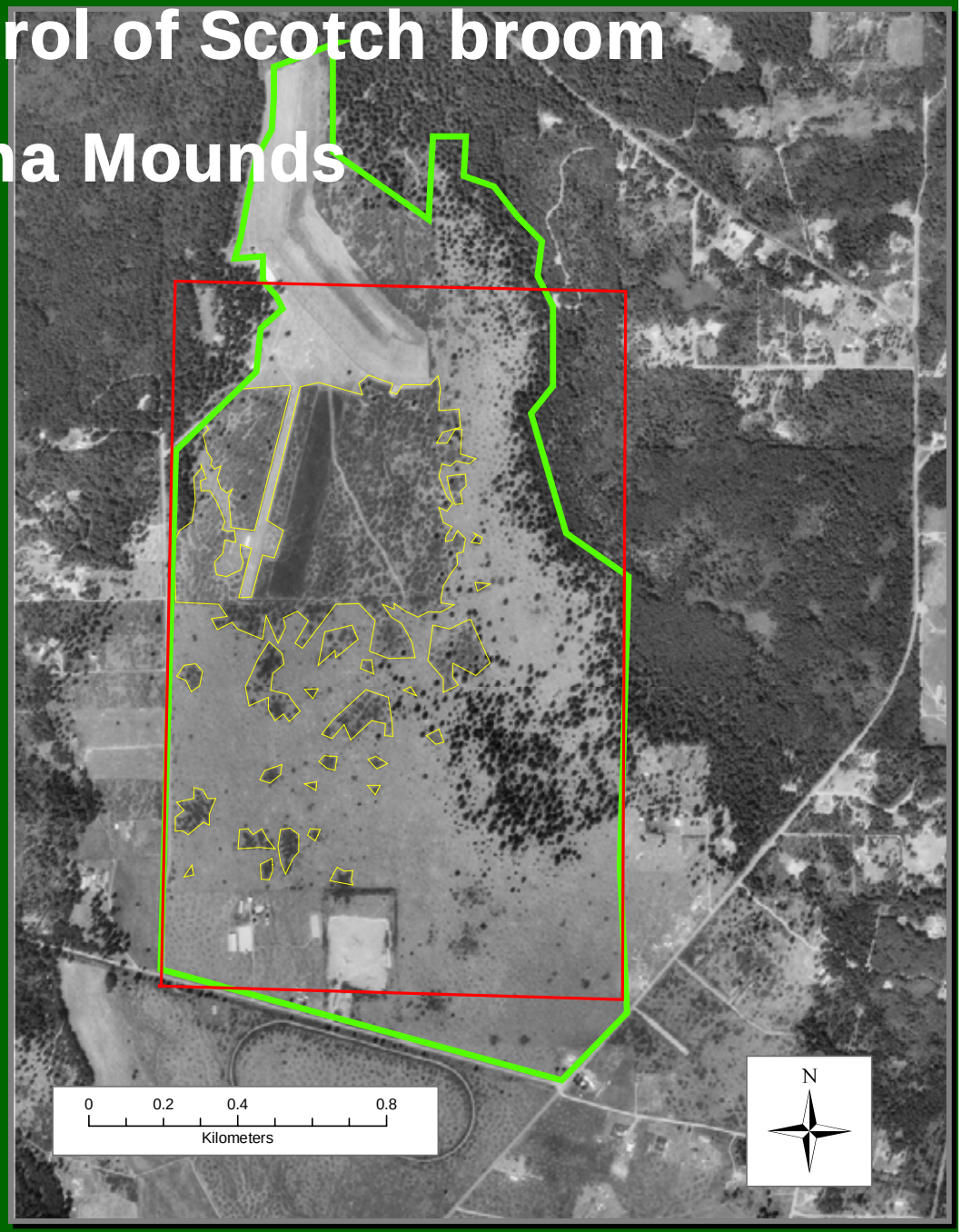
- Hand-pull
- Spot spray
- Broadcast
- Mowing

Alone or in combinations

Integrated control of Scotch broom at Mima Mounds

Treatment must be spatially and temporally variable.

Continue to apply the strategy over multiple years to achieve success.



Integrated control of Scotch broom

at Mima Mounds

Treatment must be spatially and temporally variable.

Continue to apply the strategy over multiple years to achieve success.

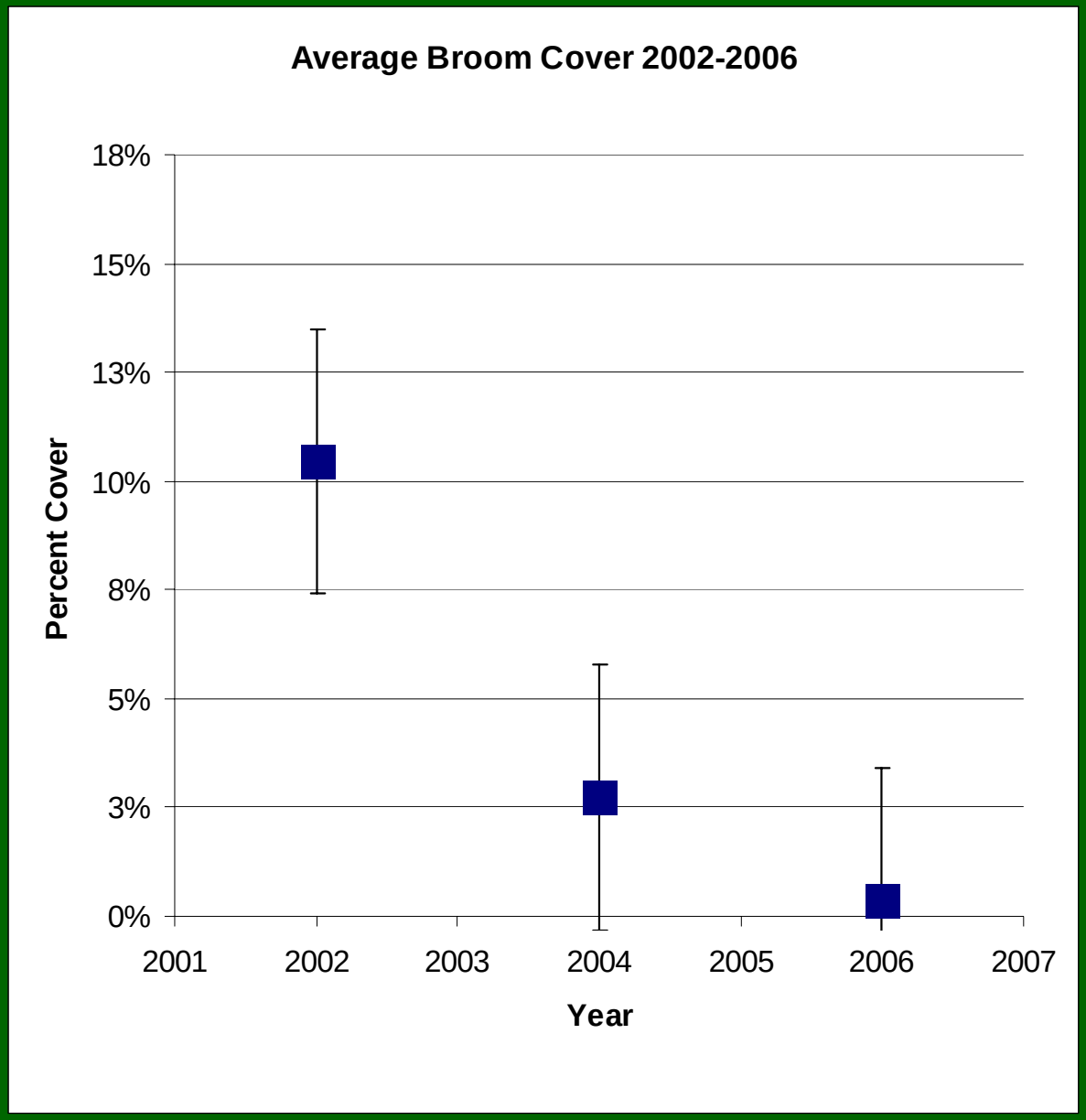
Scotch broom monitoring method

- Nine transects
- Repeated sampling
- Continuous meter plots
- Visual cover estimate

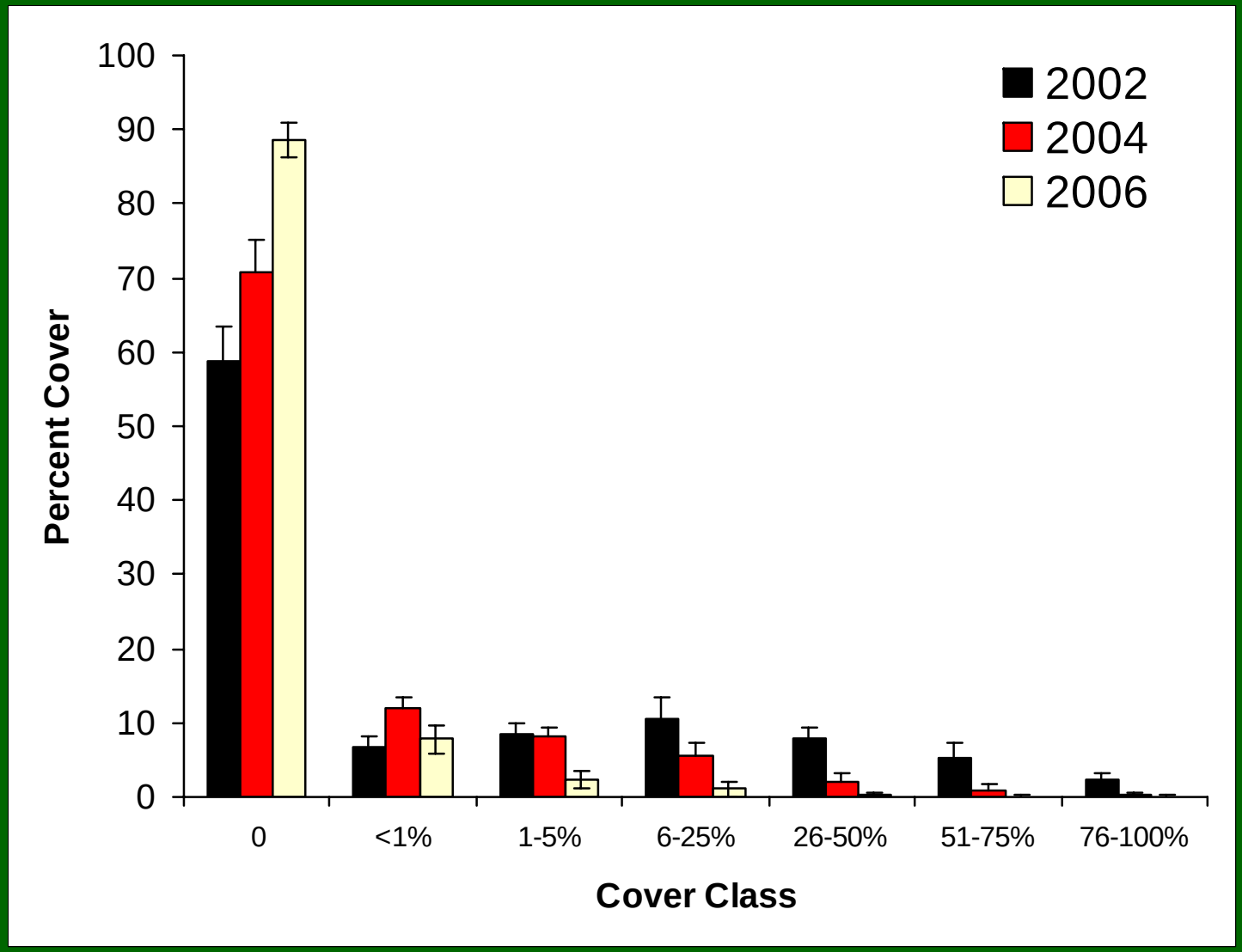
Scotch Broom pre-treatment

Mima Mounds property boundary

Broom cover 04-06



Cover classes by year

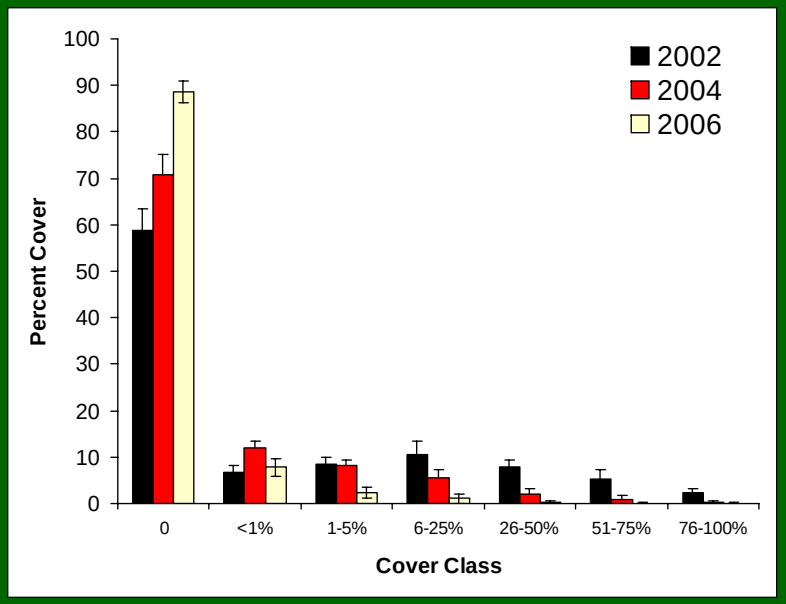


Potential rare species habitat at Mima Mounds

Integrated control of Scotch broom at Mima Mounds

Conclusions:

- Aggressive goals appropriate
- Consistent treatment
- Spatially and temporally explicit approach
- Multiple years of funding and effort critical
- Partnerships are crucial.



Cover Class	Mean 2002	Mean 2004	SE 2002	SE 2004
0	58.88776	70.8893	4.604988	4.229487
<1%	6.600312	11.89932	1.538343	1.692675
1-5%	8.47717	8.178667	1.33072	1.213615
6-25%	10.54146	5.457409	2.828186	1.841724
26-50%	7.758386	2.101434	1.63766	1.055322
51-75%	5.371695	0.950947	1.956227	0.65876
76-100%	2.363214	0.259423	0.837868	0.198033

Standard Error	Cover Class	2006 Mean	Standard deviation	SE
4.604988	0	88.52995	5.160783	2.271736
1.538343	<1%	7.847055	3.684484	1.919501
1.33072	1-5%	2.355804	1.372229	1.171422
2.828186	6-25%	1.034243	0.952011	0.975711
1.63766	26-50%	0.174135	0.264726	0.514515
1.956227	51-75%	0.039128	0.089652	0.299419
0.837868	76-100%	0.019683	0.059049	0.243001