

Alaska Landbird Monitoring System: 2003 Update

Boreal Partners in Flight

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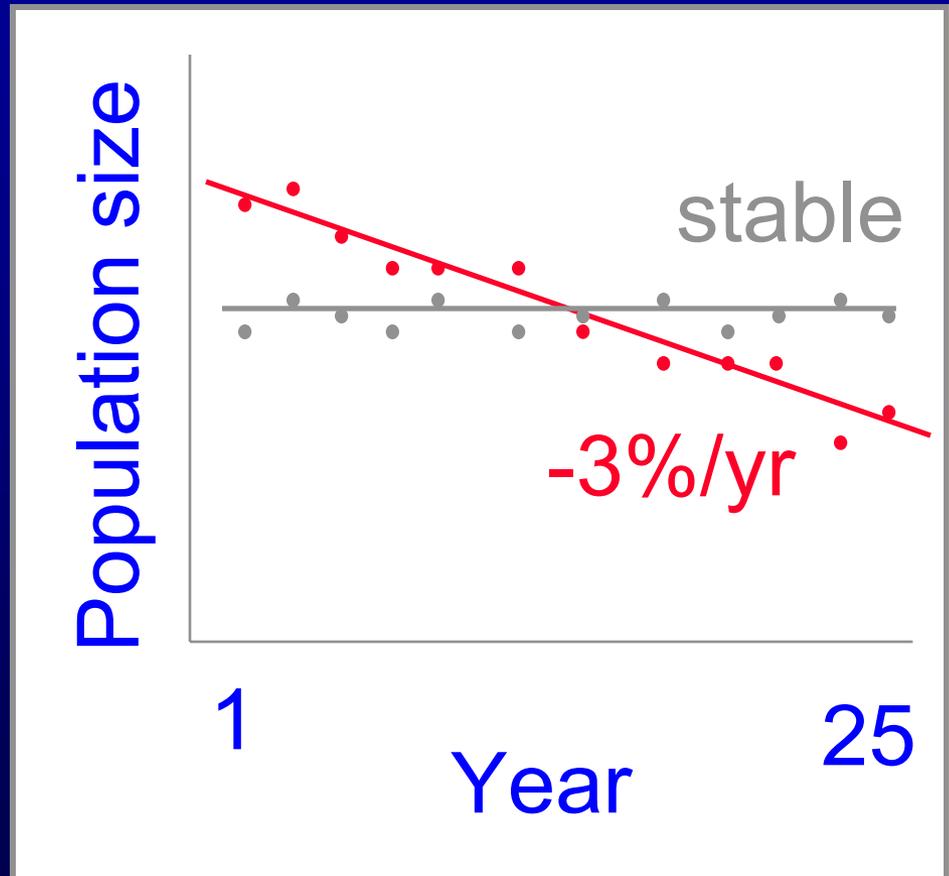


Primary Objectives

- **Assess status of landbird populations in Alaska**
 - **Population size**
 - **Rate of population change**
- **Collect basic information needed for management decisions**
 - **Distribution**
 - **Habitat**

Goal of Monitoring Program

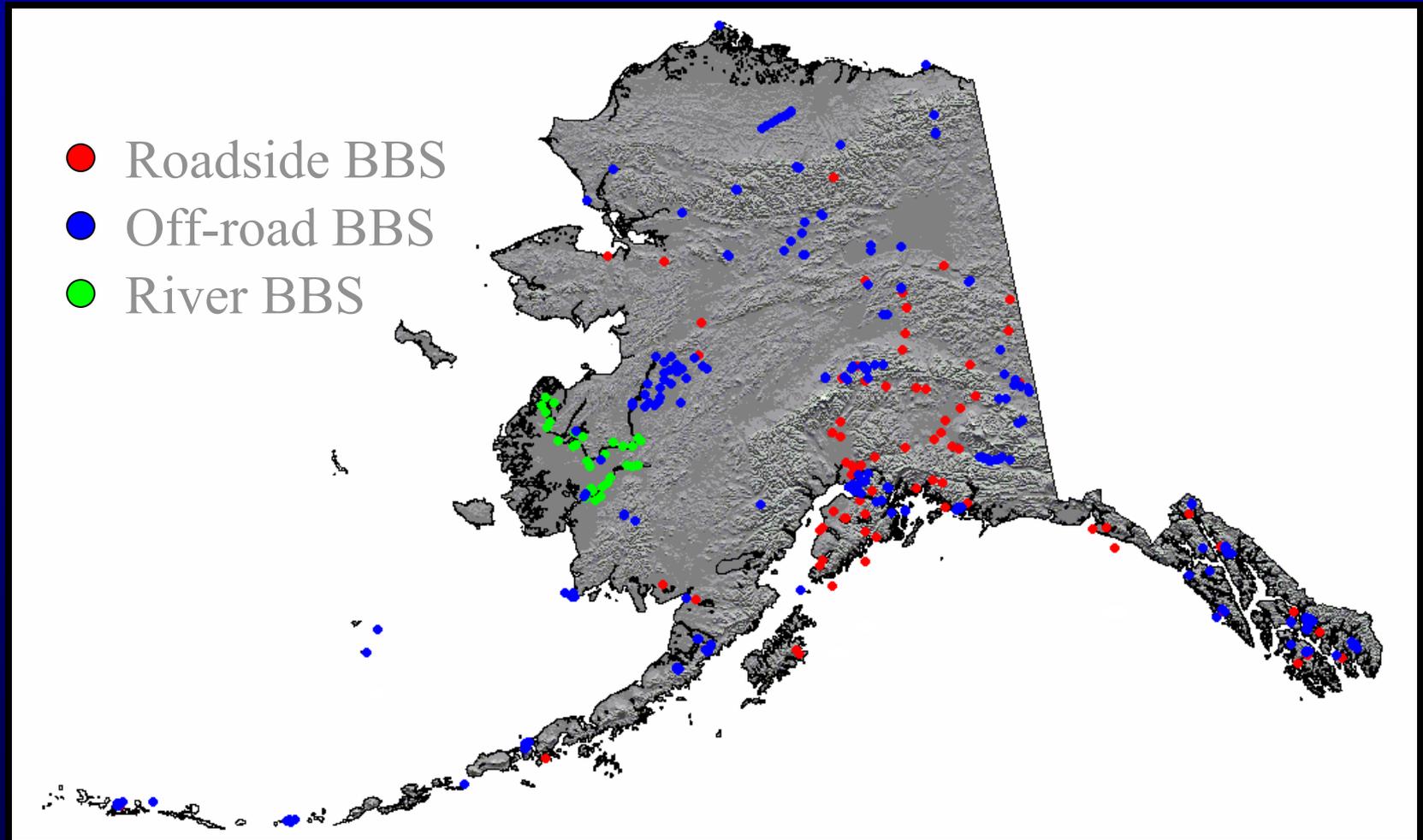
- Ability to detect 50% change in population size over 25-year period (3% per year)
- 90% probability of detecting change if it occurs



**Road Network Comparison
Alaska and the Lower 48 States**



Experimental effort

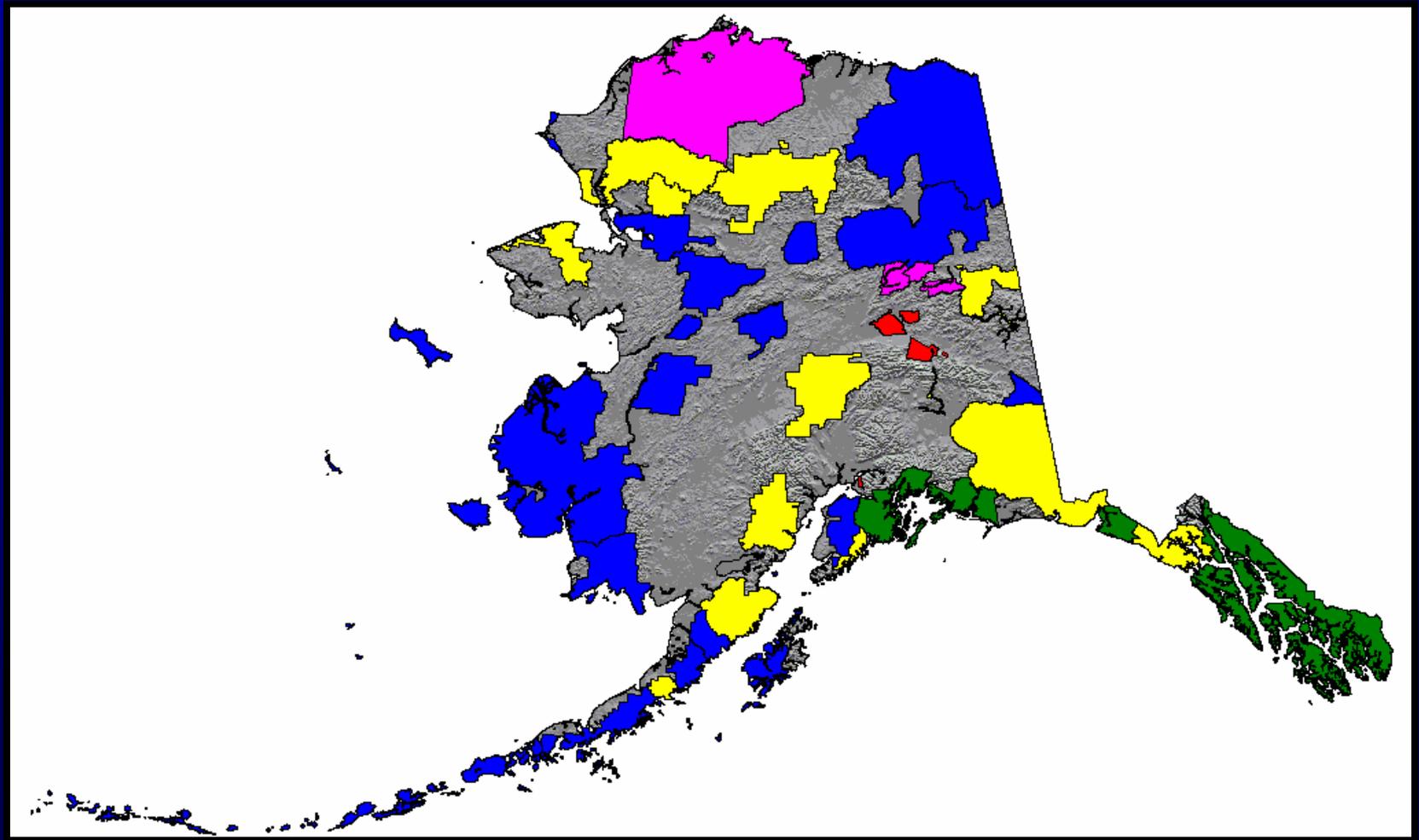


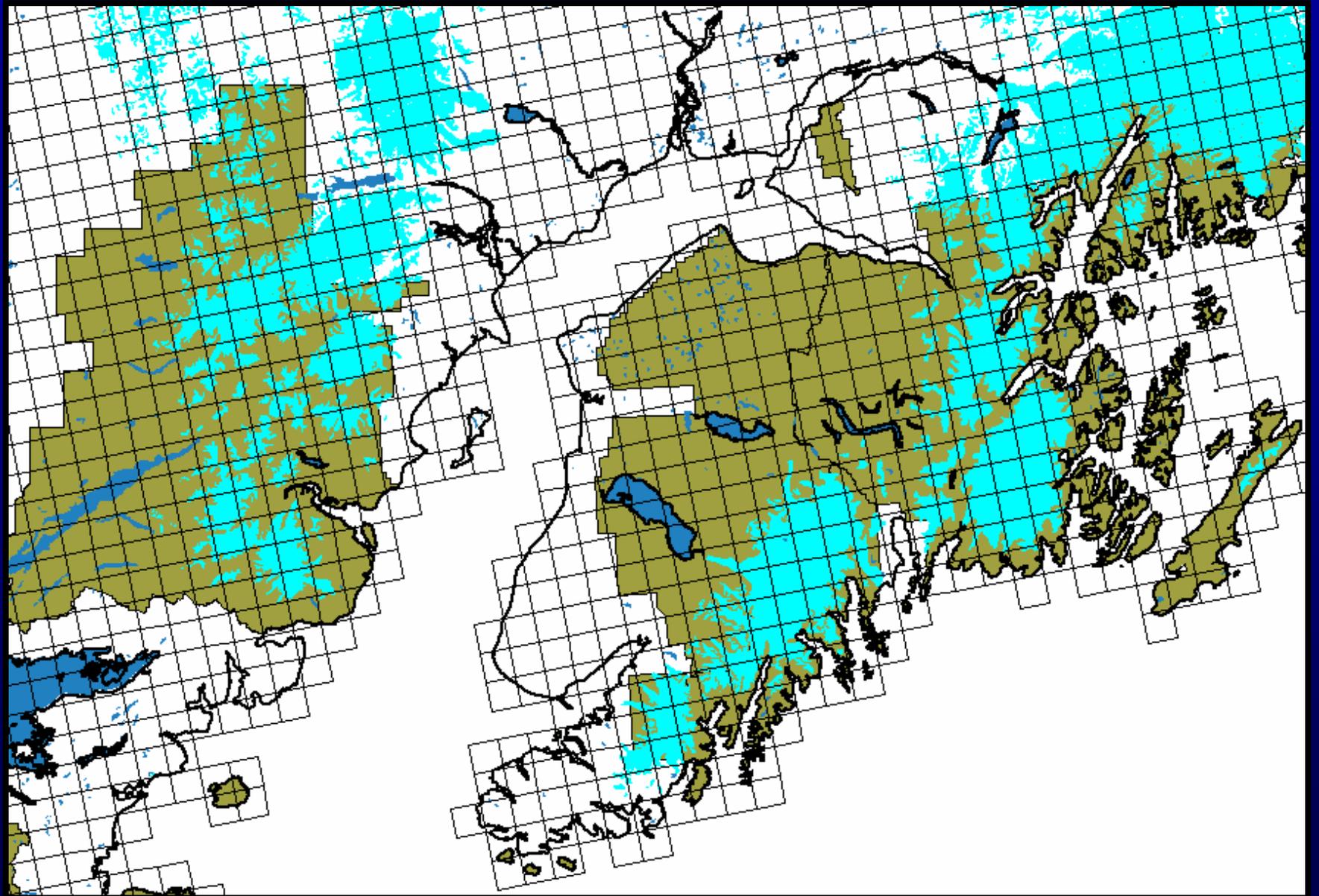


Alaska Landbird Monitoring System

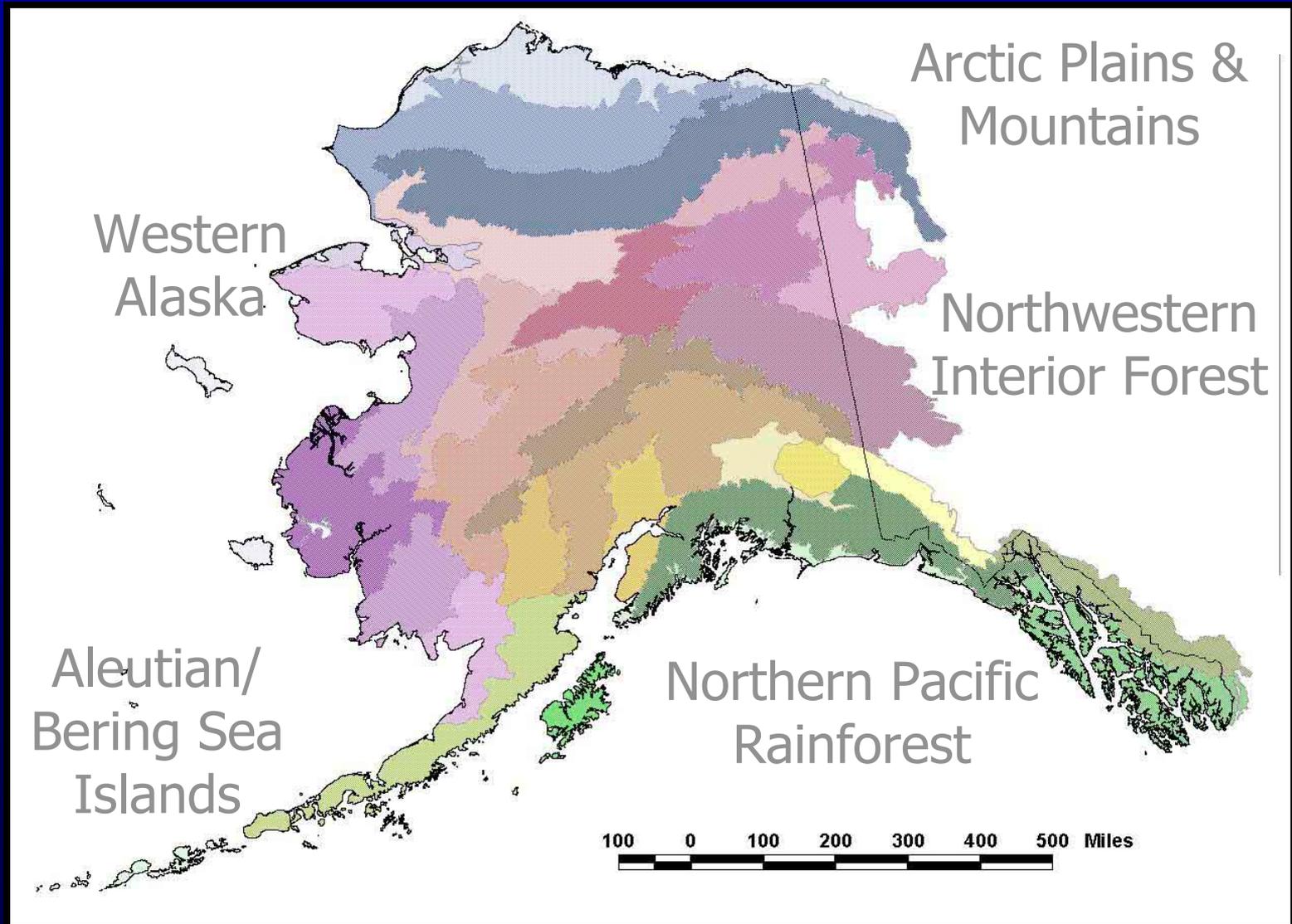
- **Broad multi-agency cooperative effort**
 - **FWS, NPS, BLM, FS, DOD**
 - **State of Alaska, Native corporations, private landowners**
- **Focuses on breeding populations**
- **Habitat data collected for management**

Primary federal resource lands





Ecoregions of Alaska



Basic sampling design

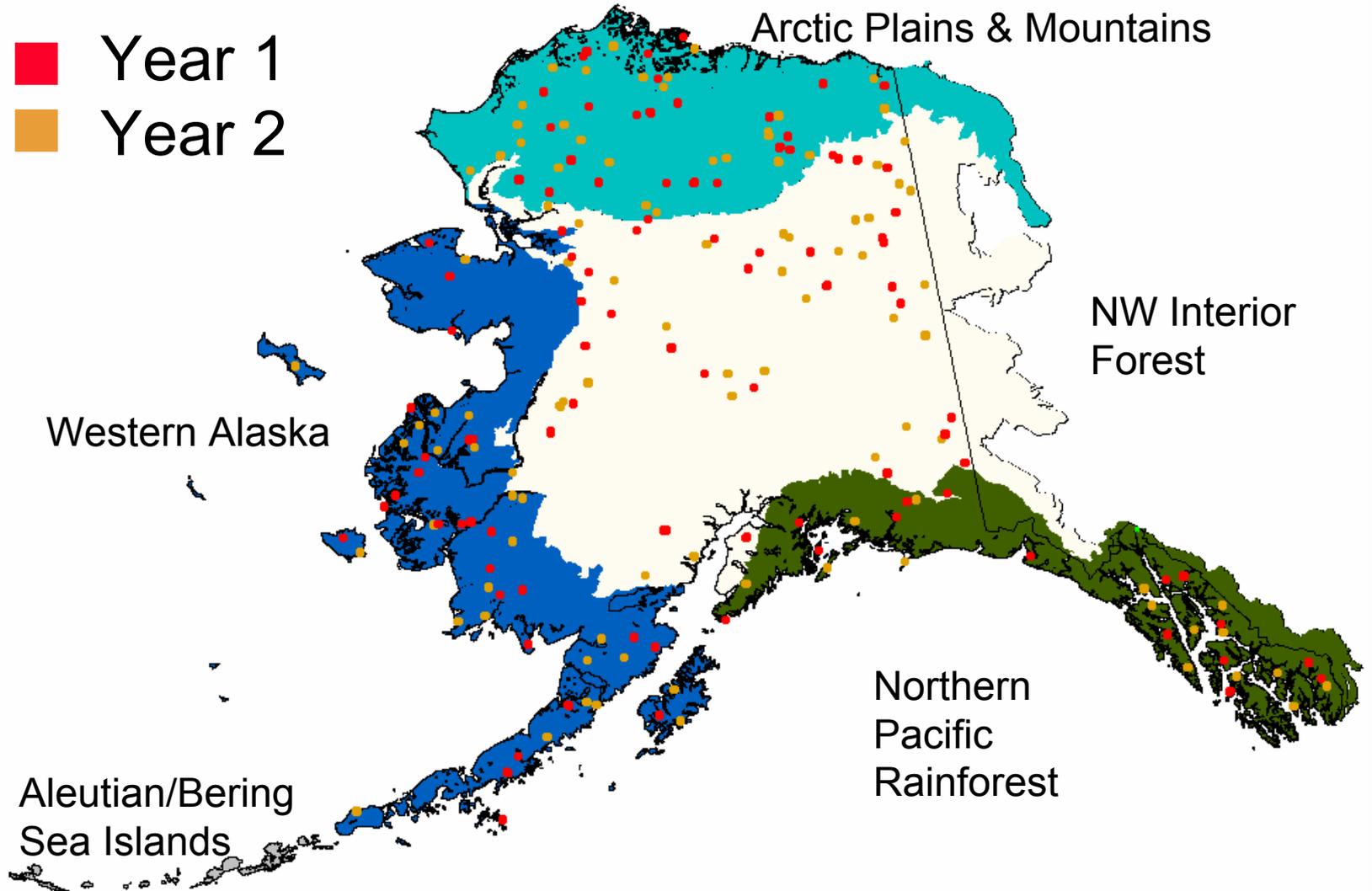
- Initial sampling frame of primary federal resource and conservation lands
- Stratified random samples
 - Stratified by ecoregion
 - Proportional allocation by land unit area
 - Minimum of 30 samples per ecoregion
- Sample units of 25 point counts
 - Bird survey data
 - Habitat data

Proposed biennial effort

Region	No. samples	Minimum No. species
Arctic	54	14
Interior	66	26
Western	50	22
Pacific Rainforest	30	25
Total	200	47

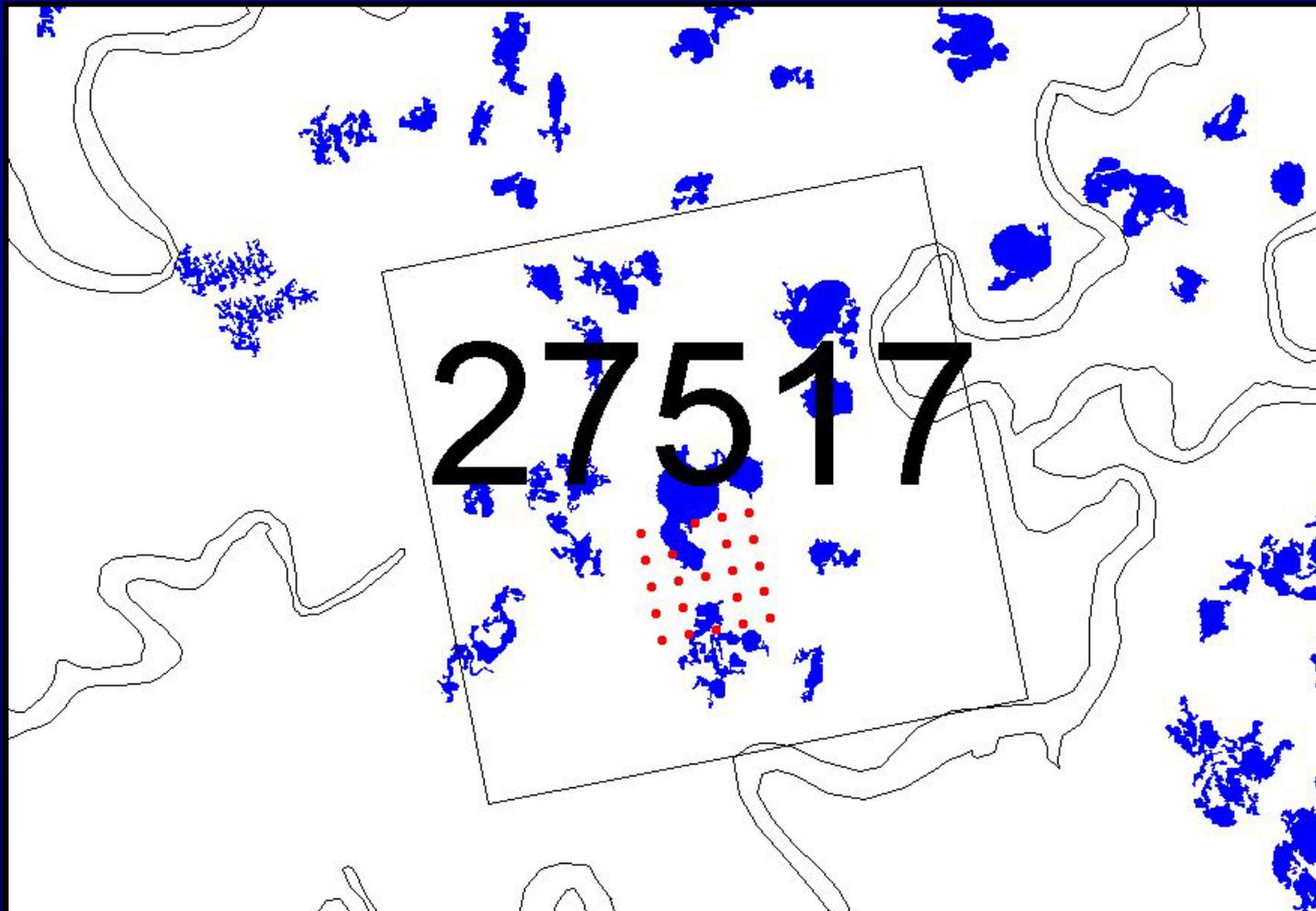
Proposed sampling by BCR

- Year 1
- Year 2



Blocks with 15-25 points

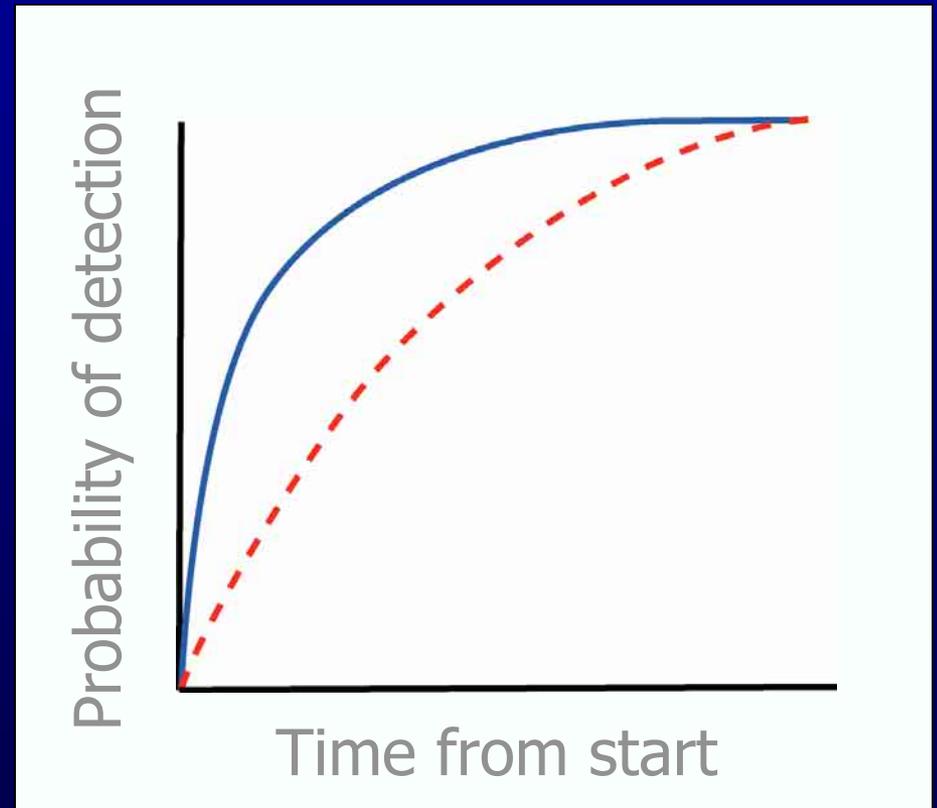
250-m or 500-m spacing



Multiple time intervals

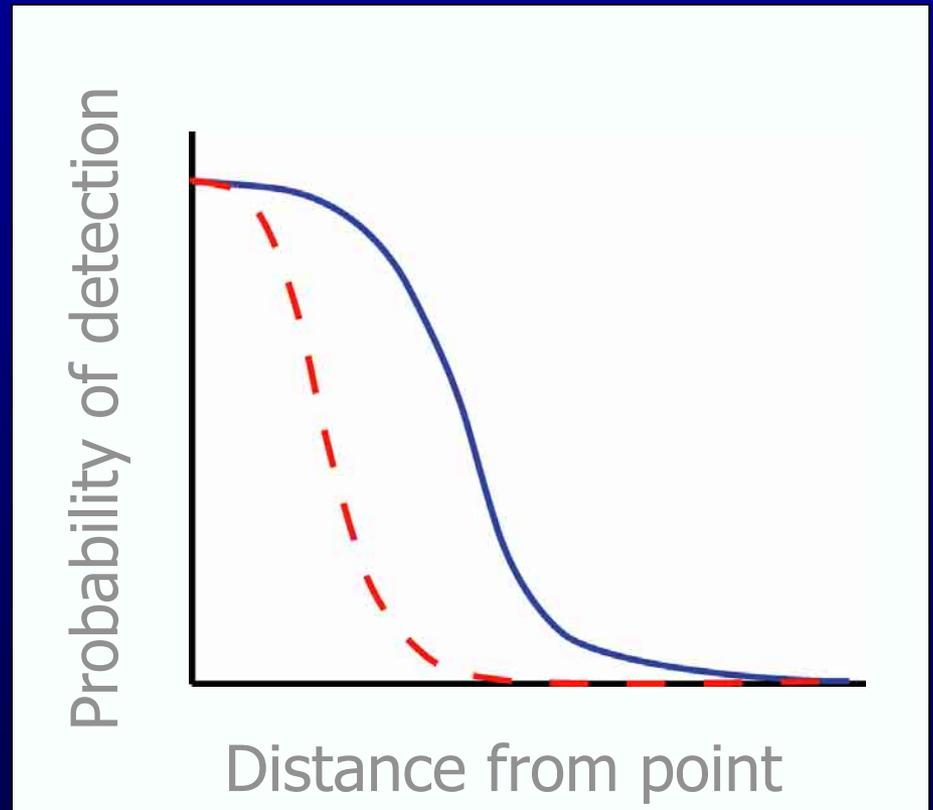
Estimate detectability

Interval	Compatibility
0-3	BBS
3-5	ORPC
5-8	Misc.
8-10	Canada



Multiple distance bands

Estimate detectability

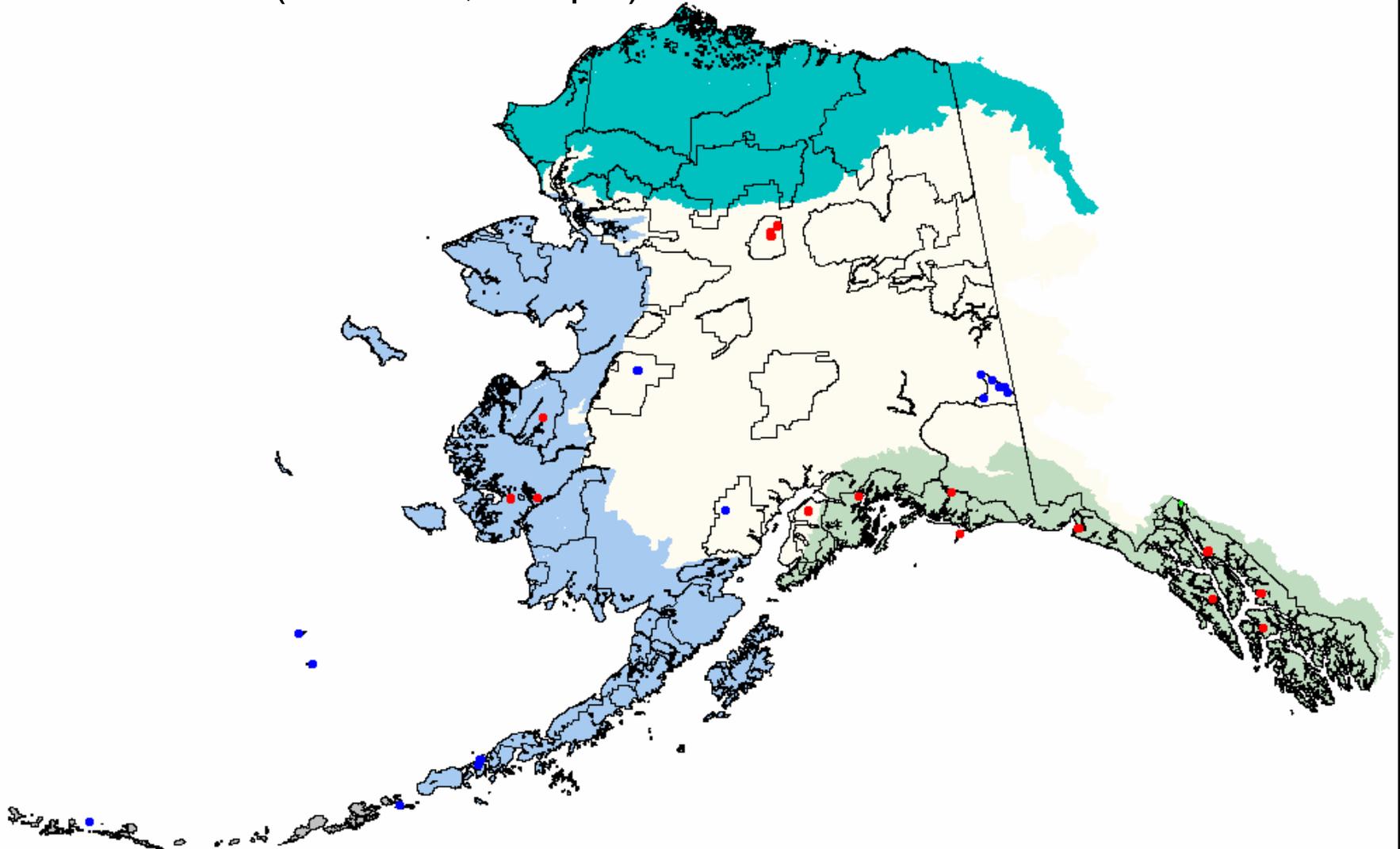


Plans for 2003-2004

- **Conduct pilot study in summer 2003**
 - **Test 5 blocks per ecoregion**
 - **Test logistical feasibility**
 - **Estimate costs**
- **Complete study design**
 - **Assess efficiency of sampling design**
 - **Revise habitat sampling relative to management needs**
- **Help secure long-term agency support**

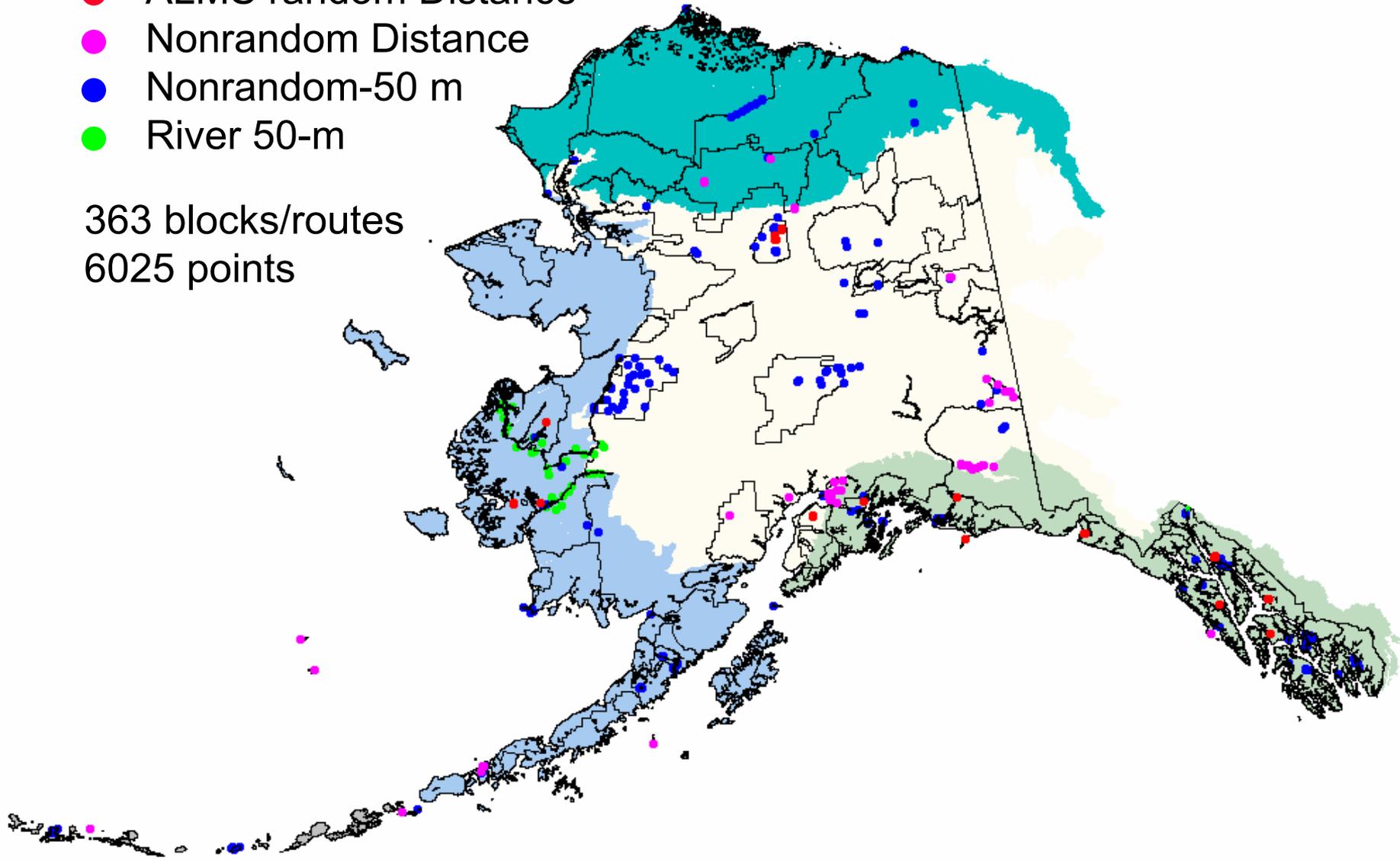
2003 Point counts

- ALMS (15 blocks, 289 pts)
- ORBBS (18 routes, 204 pts)



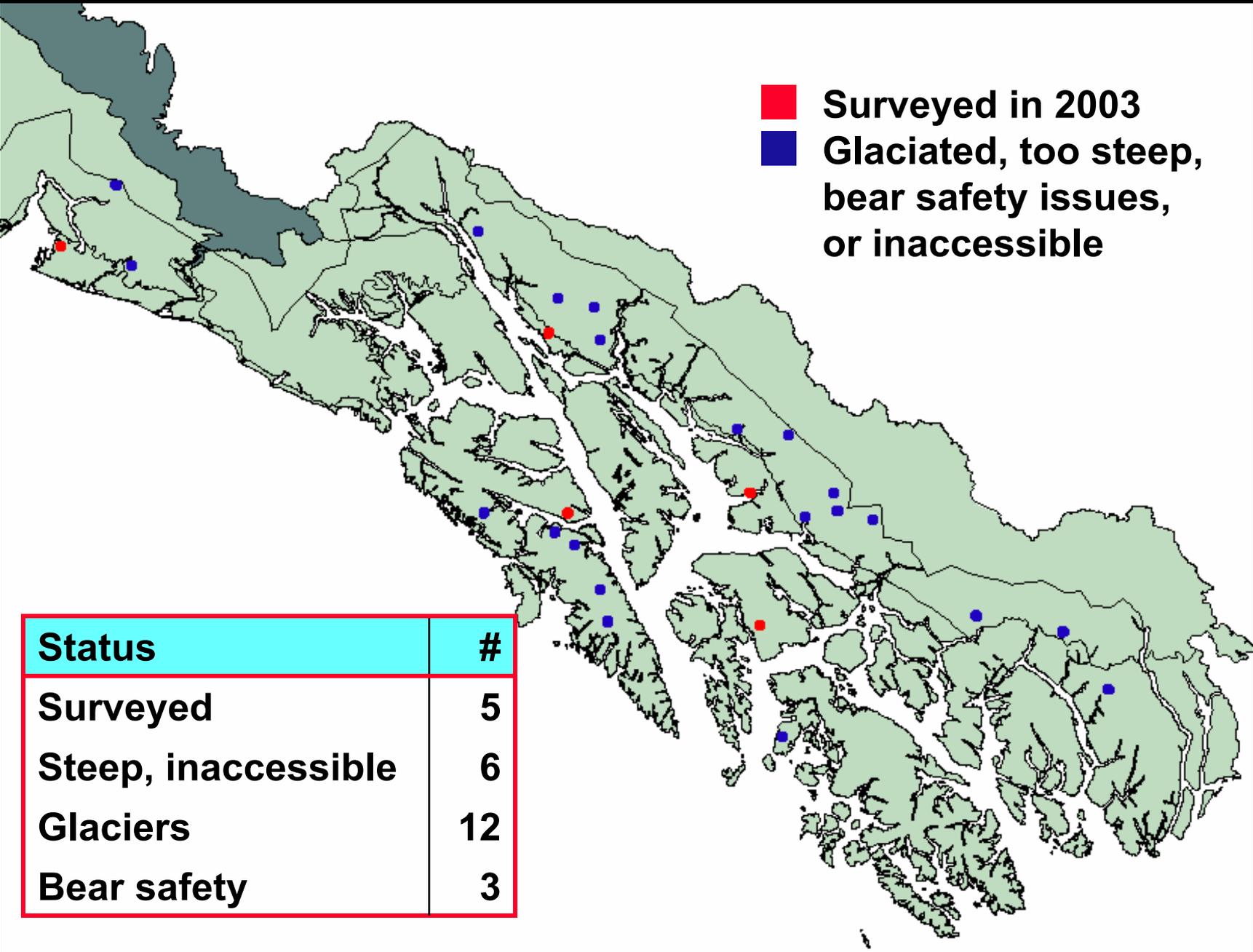
- ALMS random Distance
- Nonrandom Distance
- Nonrandom-50 m
- River 50-m

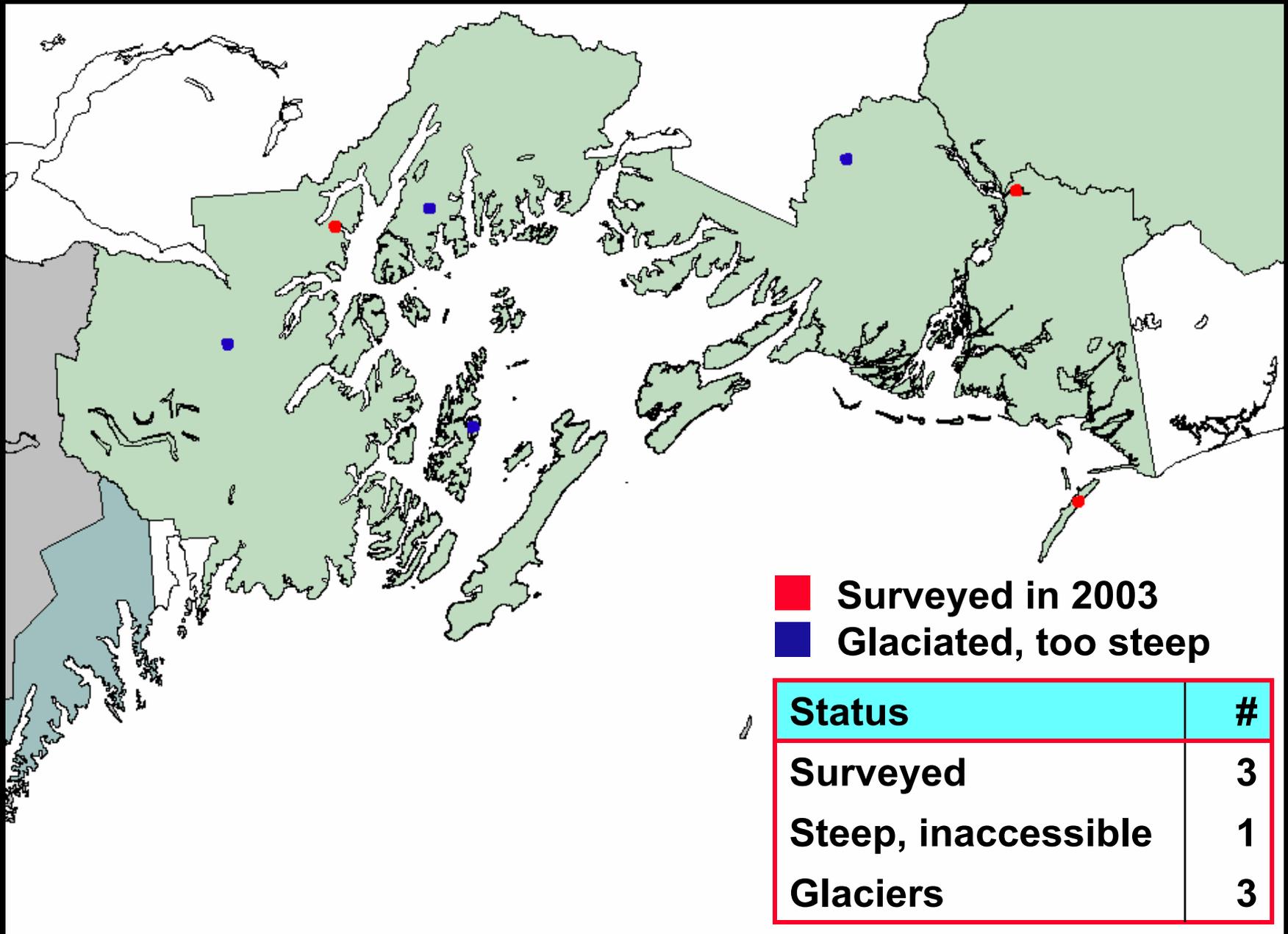
363 blocks/routes
6025 points

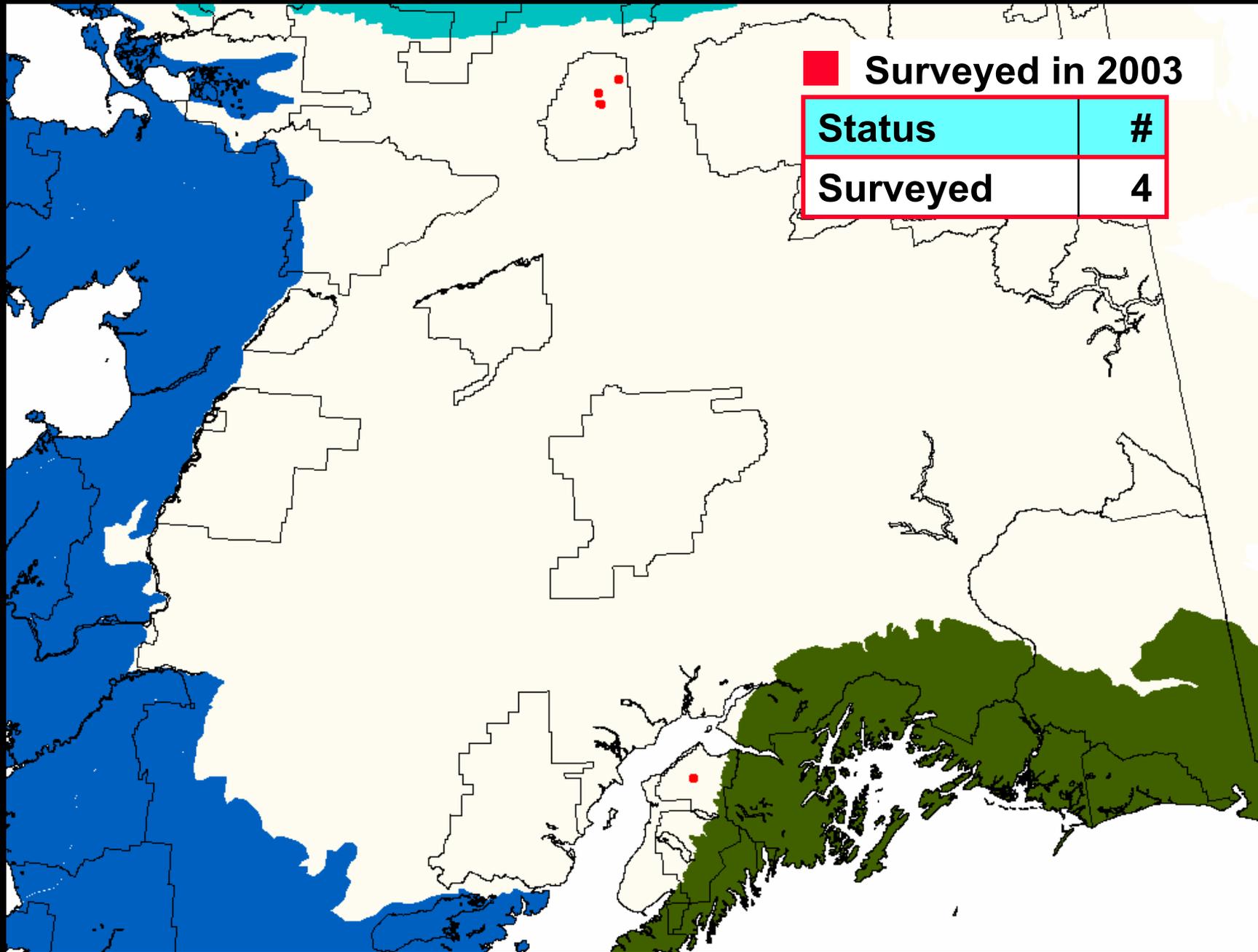


2003 Summer pilot effort

BCR	Land Unit	# blocks	# points
5	Tongass NF	5	74
5	Chugach NF	3	46
4	Kanuti NWR	3	73
4	Kenai NWR	1	25
2	Yukon Delta NWR	3	71
	Total	15	289

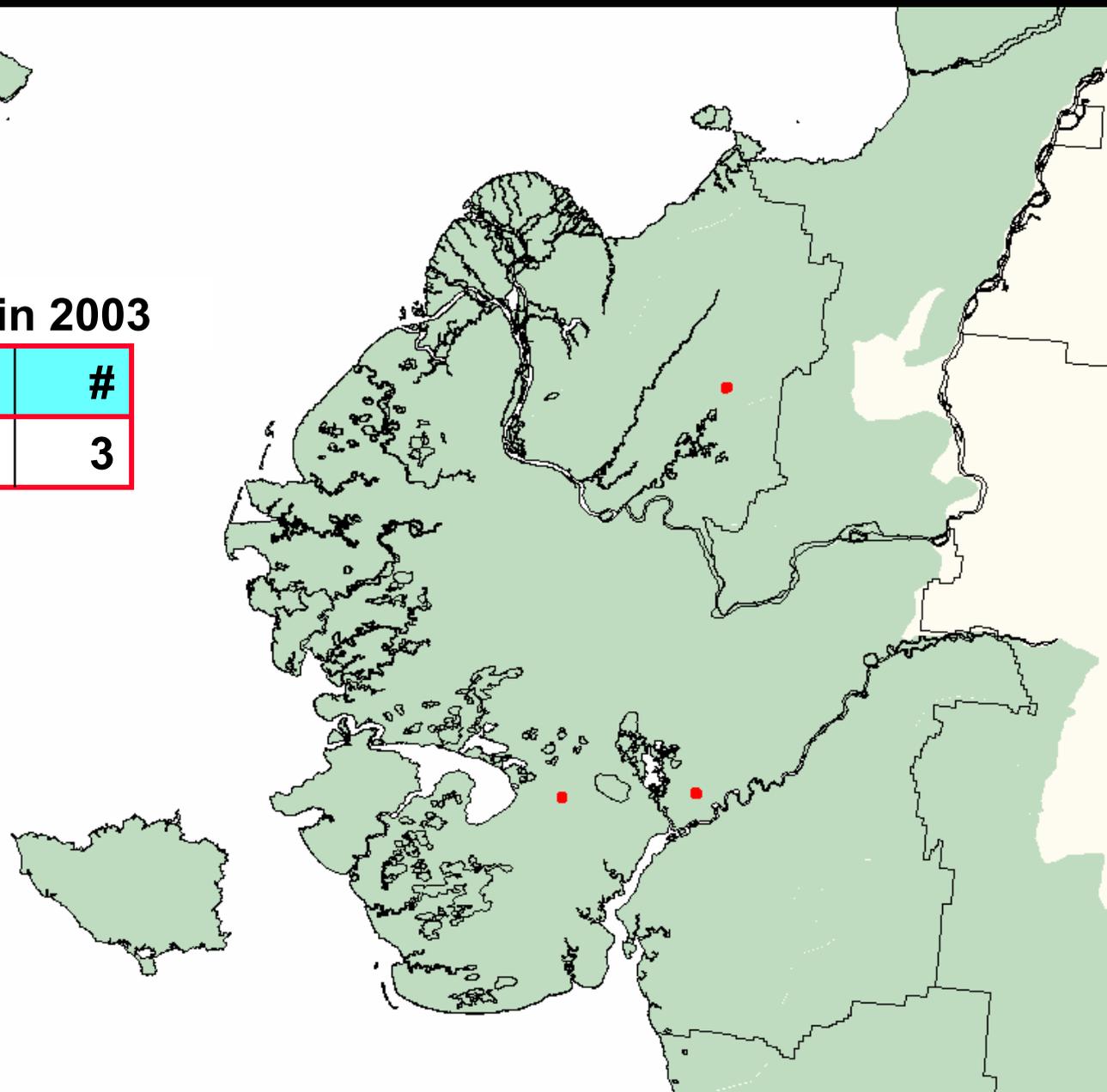






 **Surveyed in 2003**

Status	#
Surveyed	3





Reports from the field. . .

