

Sage Sparrow (*Amphispiza belli*)

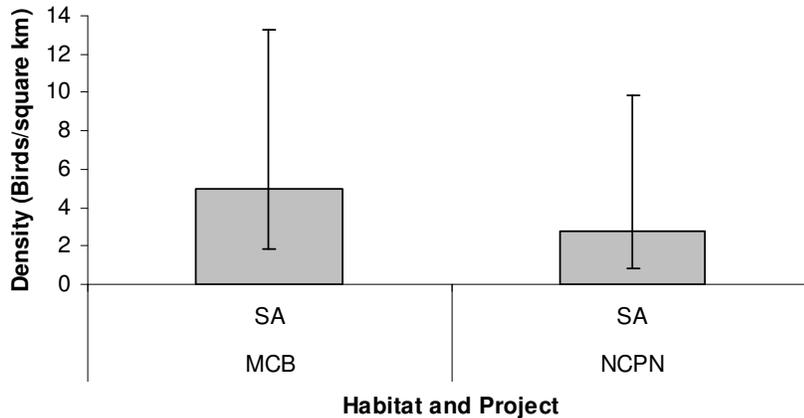
- *PIF Species of Regional Concern
- *NM-PIF Highest Priority Management Species
- *USFWS Bird of Conservation Concern
- *NMDGF - Species of Greatest Conservation Need

In 2005, we detected 24 Sage Sparrows in two habitats on the MBCNF project. We detected this species on all RMBO point-transect monitoring projects except MBBH, which is outside of the species' normal breeding range. We detected Sage Sparrow in sufficient numbers to calculate density only on MCB and NCPN.

Total number of independent detections, number of individuals, and habitat-specific density estimates for Sage Sparrow for the MBCNF monitoring project, 2005.

Habitat	D	LCL	UCL	CV	n	N
PJ	ID	--	--	--	--	7
SA	ID	--	--	--	--	17

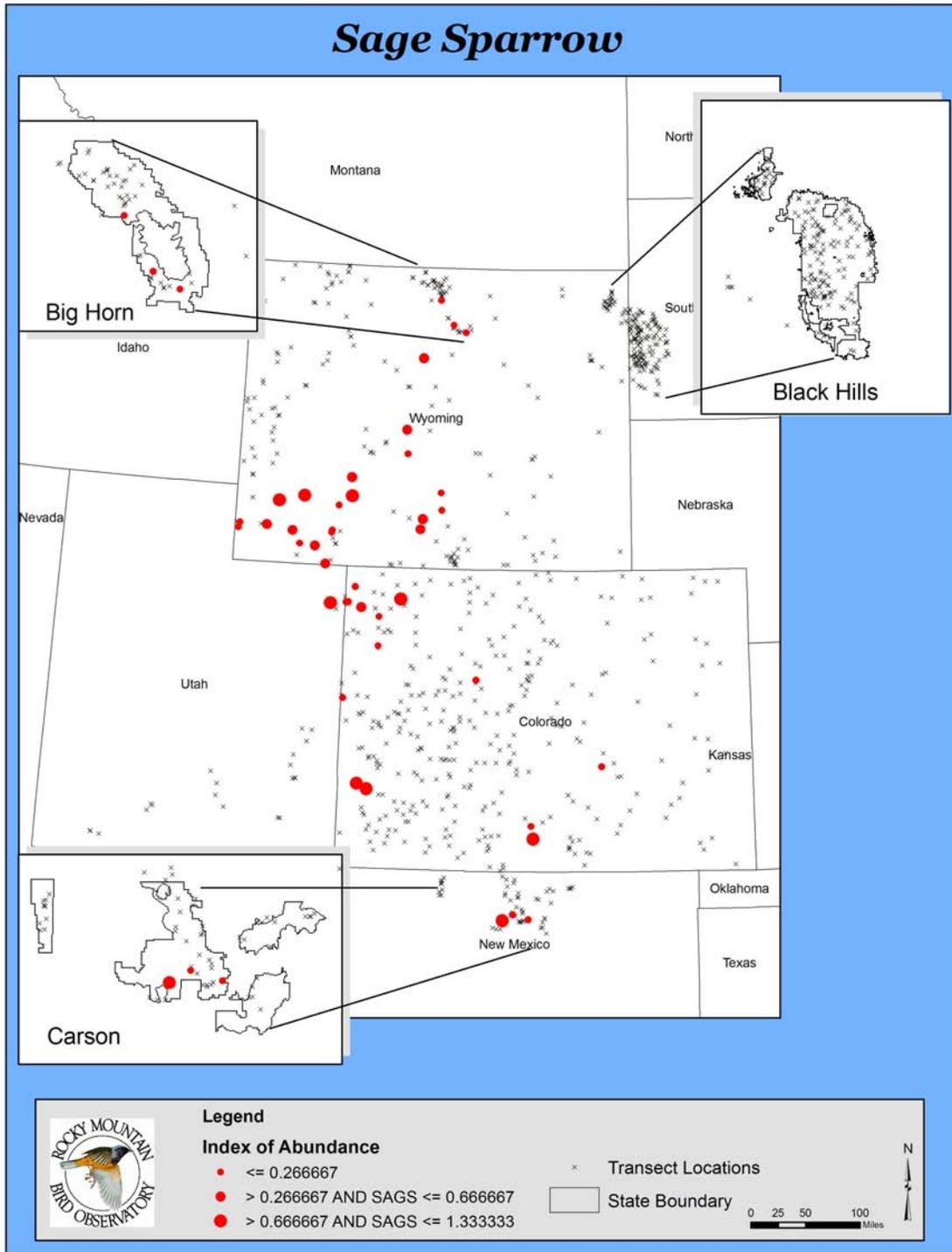
D = Density (birds/square kilometer); LCL = lower 95% confidence interval of the density; UCL = upper 95% confidence interval of the density; CV(%) = coefficient of variation of the density; n = number of independent detections; N = number of individuals; ID = insufficient data.



Relative density of Sage Sparrow among habitats for all RMBO point-count transect monitoring projects, 2005.

Summary – In the southern Rocky Mountains, Sage Sparrow nests in low-elevation stands of big sagebrush or mixed big sagbrush and greasewood (Kingery 1998, Righter et al. 2004). Also, in Colorado we have found that some Sage Sparrows will breed in pure stands of greasewood (*Sarcobatus vermiculatus*) as well as *Atriplex*-dominated shrubland.

Since the inception of MBCNF we have detected Sage Sparrow in sufficient numbers in sage shrubland to calculate density estimates. In 2005, however, we did not record sufficient detections, but we should be able to monitor this species effectively through point transects under MBCNF, possibly in sage shrubland or by pooling detections across habitats and/or years.



Dark-eyed Junco (*Junco hyemalis*)

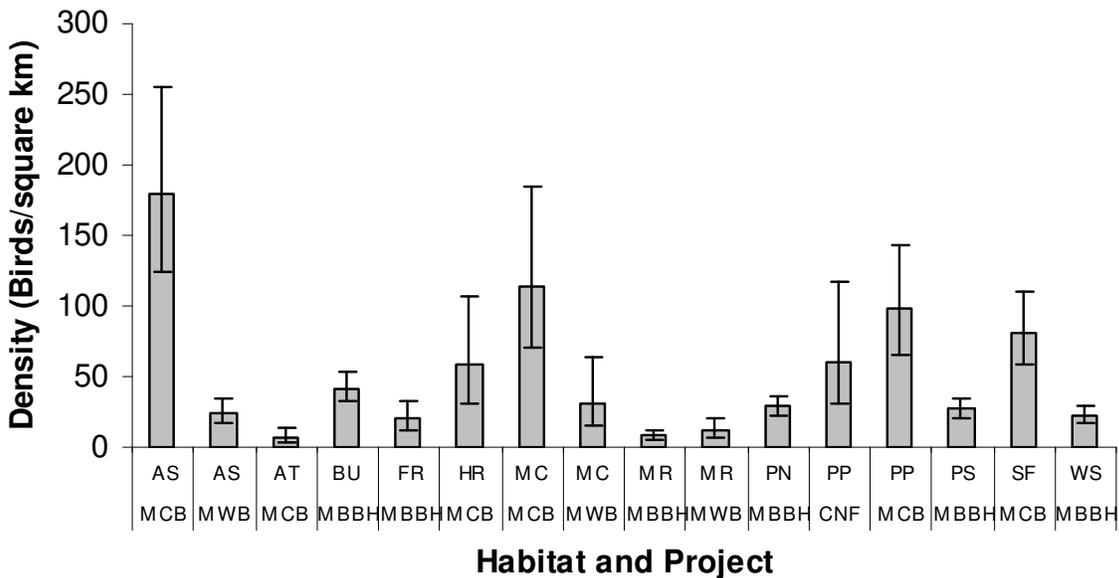
*NM-PIF High Responsibility Species for Spruce-Fir

In 2005, we detected 187 Dark-eyed Juncos in five habitats on the MBCNF project and calculated a density estimate for this species in ponderosa pine. Overall, we detected this species on all five RMBO point-count transect monitoring projects and we were able to calculate a density estimate in at least one habitat for all projects.

Total number of independent detections, number of individuals, and habitat-specific density estimates for Dark-eyed Junco for the MBCNF monitoring project, 2005.

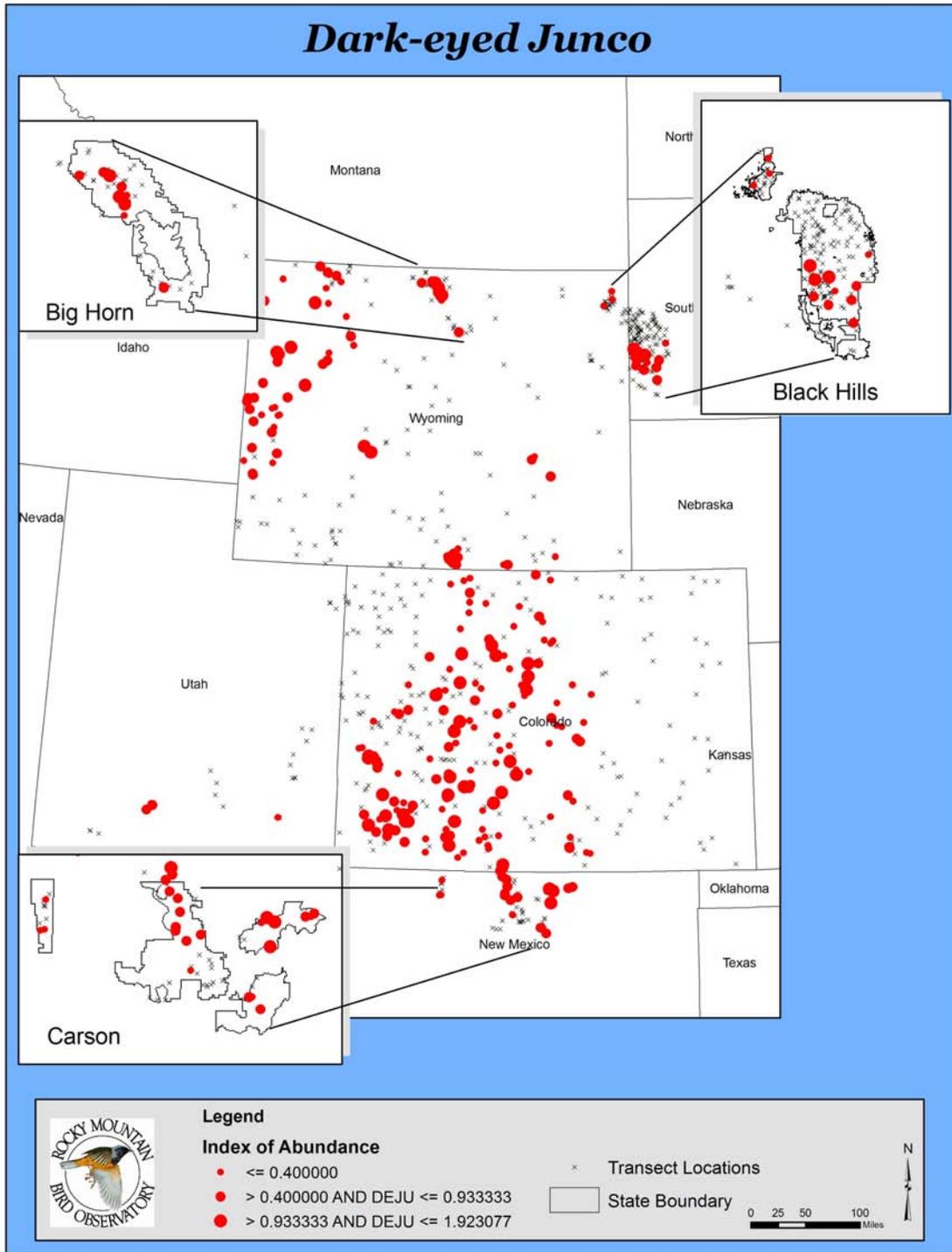
Habitat	D	LCL	UCL	CV	n	N
AS	ID	--	--	--	22	33
MC	**	--	--	--	--	41
PJ	ID	--	--	--	--	2
PP	60.66	31.21	117.91	32.9%	49	49
SF	**	--	--	--	--	62

D = Density (birds/square kilometer); LCL = lower 95% confidence interval of the density; UCL = upper 95% confidence interval of the density; CV(%) = coefficient of variation of the density; n = number of independent detections; N = number of individuals; ID = insufficient data; ** = incorrectly estimated densities.



Relative density of Dark-eyed Junco among habitats for all RMBO point-count transect monitoring projects, 2005.

Summary – Dark-eyed Junco nests in all high-elevation forested habitats. The “Gray-headed” subspecies is the only Dark-eyed Junco subspecies that breeds in the CNF. Dark-eyed Junco should be effectively monitored under MBCNF through point transects across a range of habitats, including aspen, mixed conifer, ponderosa pine, and spruce-fir.



Western Meadowlark (*Sturnella neglecta*)

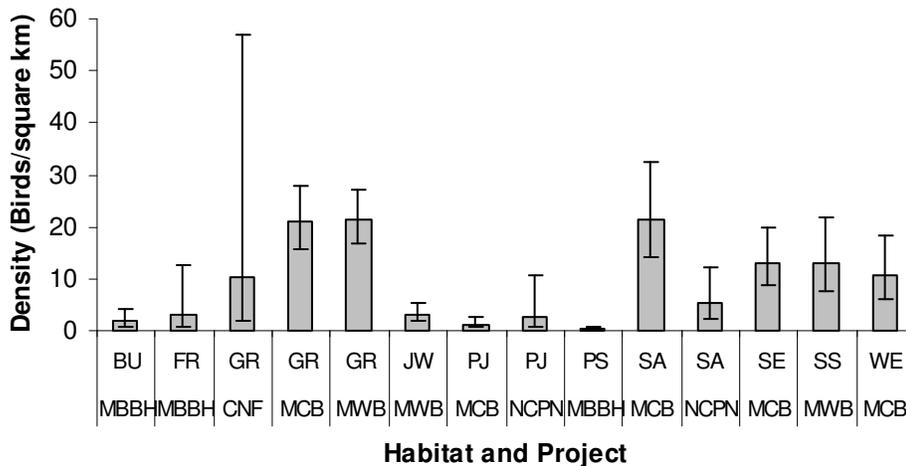
*NM-PIF Habitat Representative Species for Plains and Mesa Grassland

In 2005, we detected 66 Western Meadowlarks in four habitats on the MBCNF project and were able to calculate a density estimate in grassland habitat. Overall, Western Meadowlark was recorded on all five RMBO monitoring projects and we were able to calculate a density estimate in at least one habitat for all projects.

Total number of independent detections, number of individuals, and habitat-specific density estimates for Western Meadowlark for the MBCNF monitoring project, 2005.

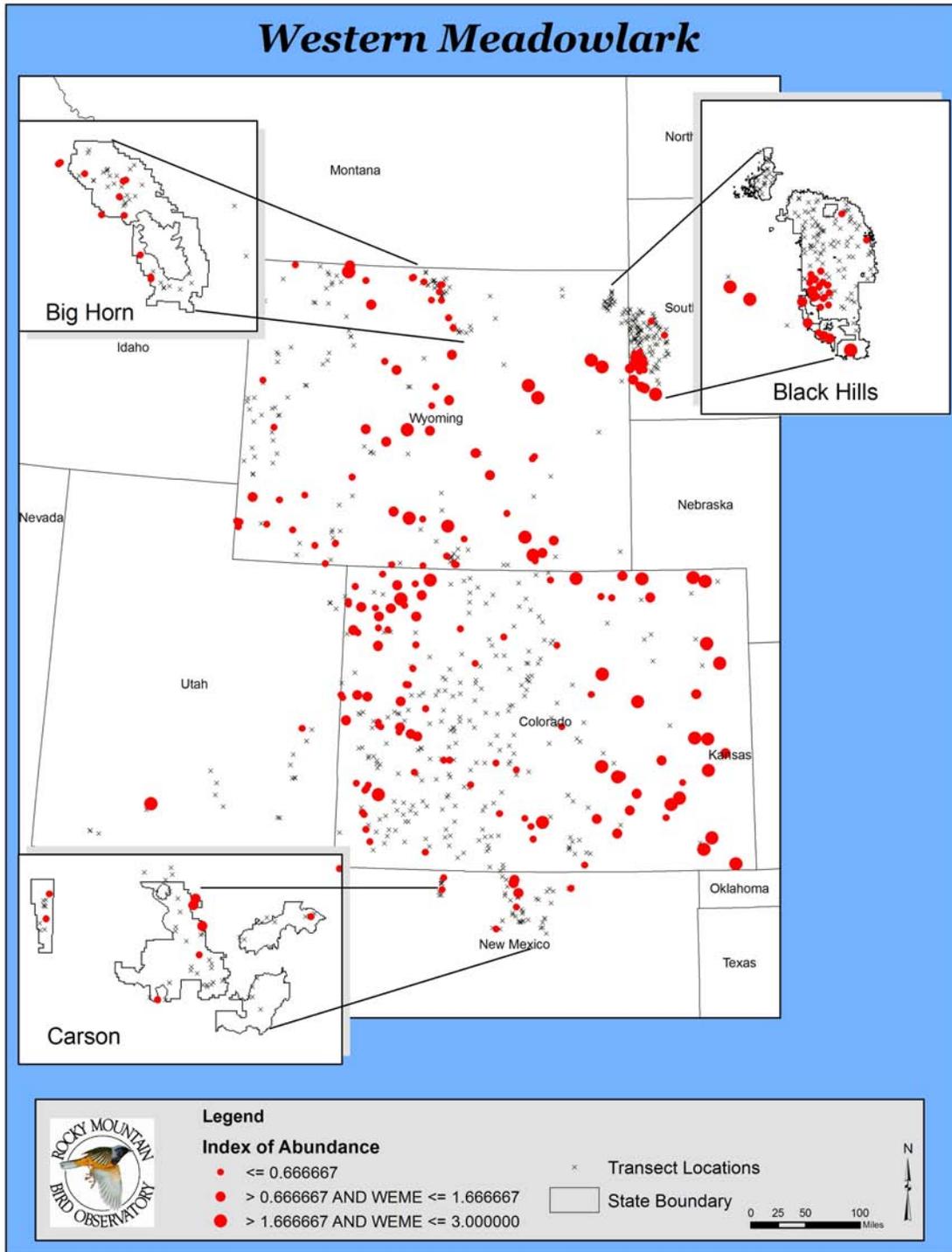
Habitat	D	LCL	UCL	CV	n	N
GR	10.49	1.93	56.88	25.0%	39	39
PJ	ID	--	--	--	--	5
PP	ID	--	--	--	--	6
SA	ID	--	--	--	--	16

D = Density (birds/square kilometer); LCL = lower 95% confidence interval of the density; UCL = upper 95% confidence interval of the density; CV(%) = coefficient of variation of the density; n = number of independent detections; N = number of individuals; ID = insufficient data.



Relative density of Western Meadowlark among habitats for all RMBO point-count transect monitoring projects, 2005.

Summary – Western Meadowlark primarily nests in native grasslands, and semi-desert and sagebrush shrublands, and it prefers good grass and litter cover with some shrub cover (Kingery 1998). Western Meadowlark should be effectively monitored under MBCNF through point-transects in grassland habitat.



Pine Grosbeak
(*Pinicola enucleator*)

*NM-PIF Habitat Representative Species

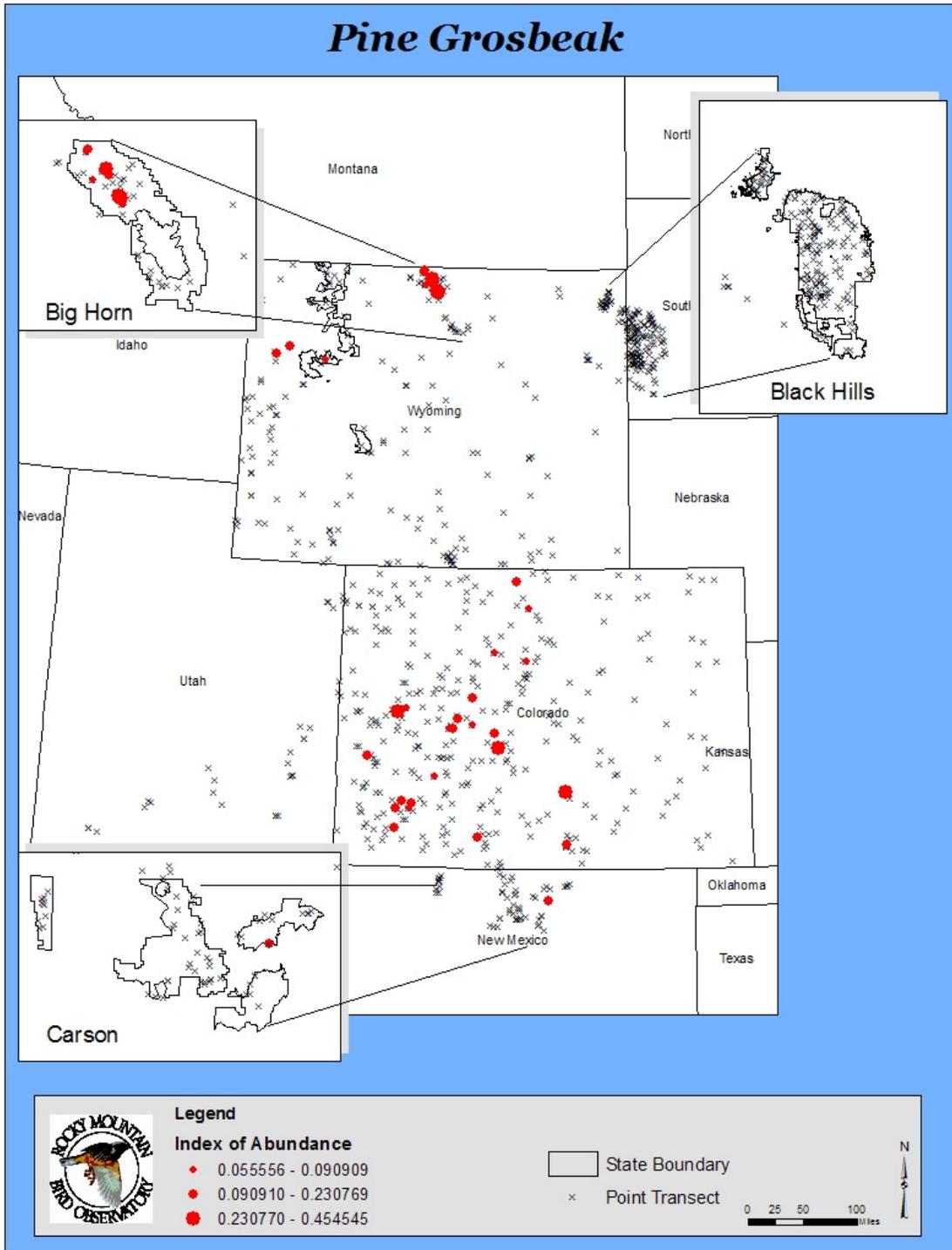
In 2005, we detected Pine Grosbeak seven times on spruce-fir transects on the MBCNF project. Overall, we detected it on three RMBO point-count transect monitoring projects but totals were insufficient to calculate a density estimate in any habitat on any project.

Total number of independent detections, number of individuals, and habitat-specific density estimates for Pine Grosbeak for the MBCNF monitoring project, 2005.

Habitat	D	LCL	UCL	CV	n	N
SF	ID	--	--	--	--	7

D = Density (birds/square kilometer); LCL = lower 95% confidence interval of the density; UCL = upper 95% confidence interval of the density; CV(%) = coefficient of variation of the density; n = number of independent detections; N = number of individuals; ID = insufficient data.

Summary – Pine Grosbeak is a high-elevation conifer forest specialist and rarely visits areas of low-elevation even in the winter. Pine Grosbeak is not detected in sufficient numbers to effectively monitor its population through point transects in any one habitat or across habitats under MBCNF. Given interest though, with several years' data, we may be able to pool data across years and habitats and weight observations by habitat area, to generate a global detection function for this species, thereby generating an annual density estimate that may be robust enough for population-trend monitoring.



Cassin's Finch
(*Carpodacus cassinii*)
 *PIF Species of Regional Concern

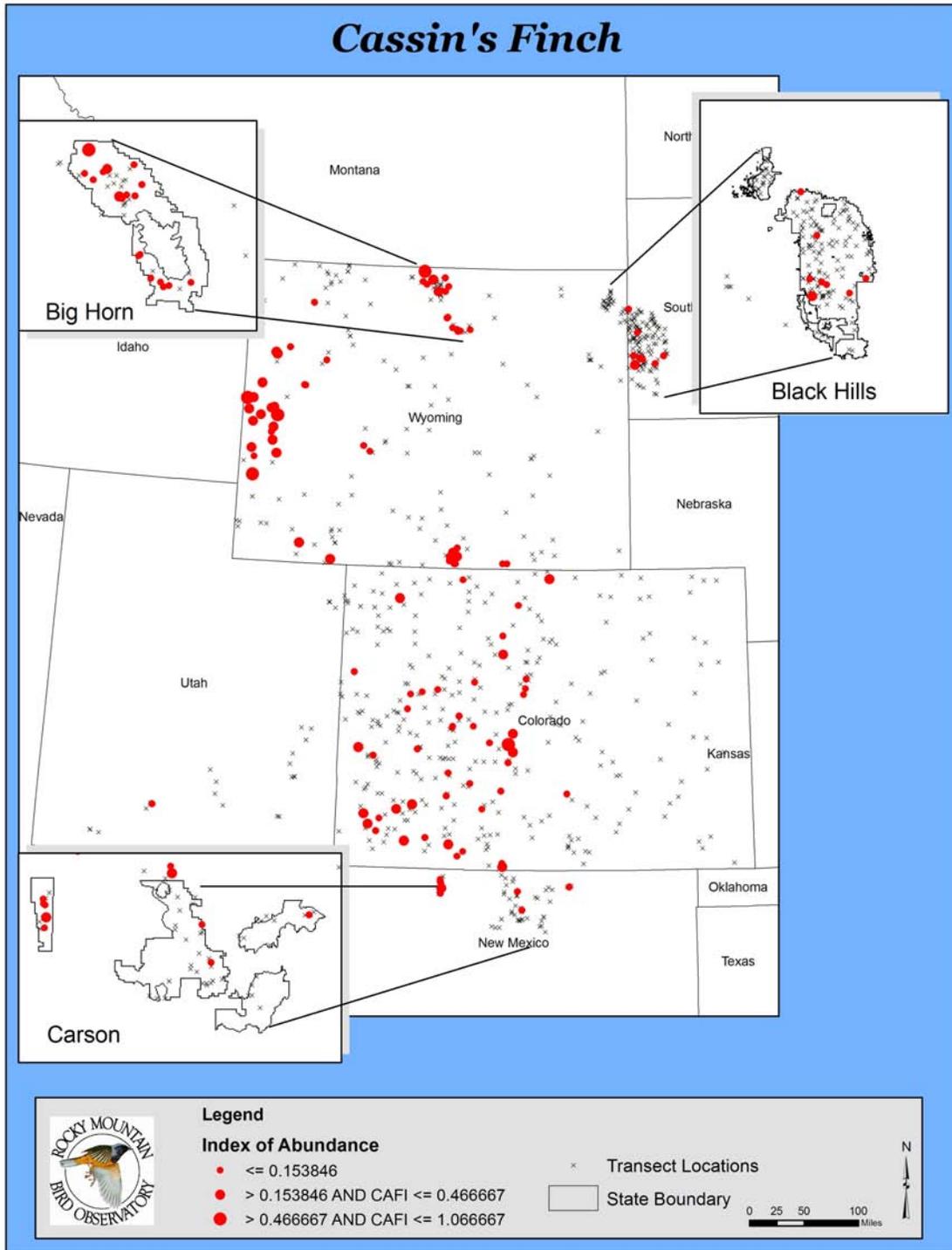
We detected ten Cassin's Finch in three habitats on the MBCNF project in 2005 and recorded it on all other RMBO point-count transect monitoring projects. However, we were able to calculate a density estimate only in ponderosa pine habitat on the MCB project.

Total number of independent detections, number of individuals, and habitat-specific density estimates for Cassin's Finch for the MBCNF monitoring project, 2005.

Habitat	D	LCL	UCL	CV	n	N
PJ	ID	--	--	--	--	2
PP	ID	--	--	--	--	4
SA	ID	--	--	--	--	4

D = Density (birds/square kilometer); LCL = lower 95% confidence interval of the density; UCL = upper 95% confidence interval of the density; CV(%) = coefficient of variation of the density; n = number of independent detections; N = number of individuals; ID = insufficient data.

Summary – Cassin's Finch nests in all coniferous forests, but prefers high elevation conifers. Detections of this species are infrequent in the CNF and we are unable to provide density estimates in any habitat. Under MBCNF, with several years' data, we may be able to pool data across years and habitats and weight observations by habitat area, to generate a global detection function for this species and thereby generate an annual statewide density estimate that may be robust enough for population-trend monitoring.



Pine Siskin
(*Carduelis pinus*)

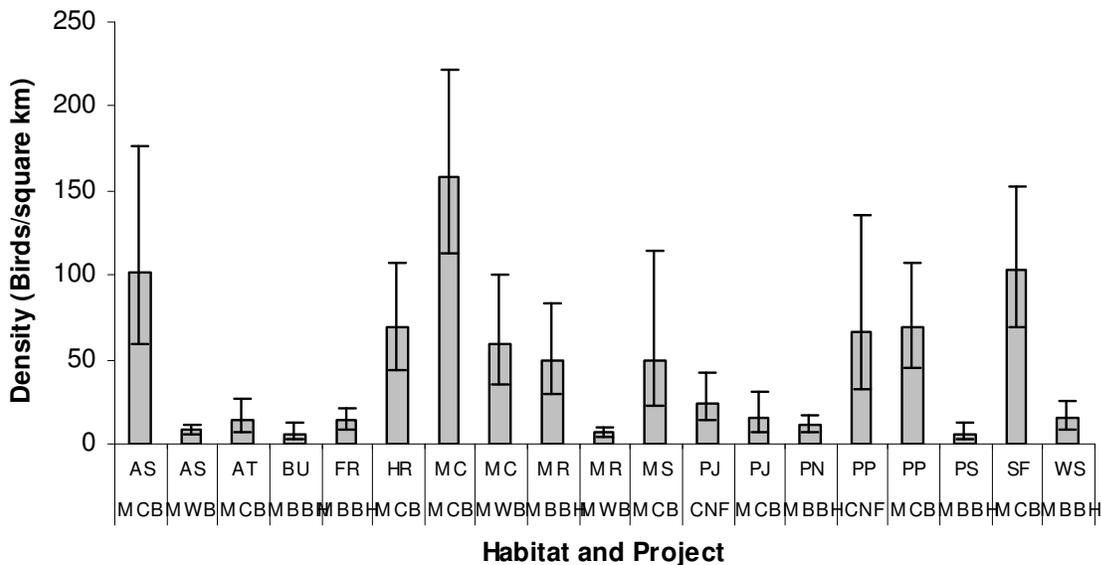
*PIF Species of Regional Concern
*PIF Regional Stewardship Species

We detected 283 Pine Siskins on the MBCNF project in 2005. Overall, we detected this species on all RMBO point-count transect monitoring projects in 2005 and calculated density estimates in at least one habitat on three other projects.

Total number of independent detections, number of individuals, and habitat-specific density estimates for Pine Siskin for the MBCNF monitoring project, 2005.

Habitat	D	LCL	UCL	CV	n	N
AS	ID	--	--	--	--	11
GR	ID	--	--	--	--	1
MC	ID	**	--	--	--	46
PJ	24.68	14.37	42.40	27.7%	65	92
PP	66.92	32.97	135.85	35.6%	25	35
SA	ID	--	--	--	--	4
SF	ID	**	--	--	--	94

D = Density (birds/square kilometer); LCL = lower 95% confidence interval of the density; UCL = upper 95% confidence interval of the density; CV(%) = coefficient of variation of the density; n = number of independent detections; N = number of individuals; ID = insufficient data; ** = incorrectly recorded distances.



Relative density of Pine Siskin among habitats for all RMBO point-count transect monitoring projects, 2005.

Summary – Pine Siskin nests all coniferous forests but prefers to breed at high elevations. This species should be effectively monitored through point transects in four habitats under MBCNF.

