

Gray Vireo
(*Vireo vicinior*)

- *PIF Species of Continental Concern
- *PIF Species of Regional Concern
- *PIF Regional Stewardship Species
- *NM-PIF Highest Priority Management Species for Pinyon-Juniper
- *USFWS Bird of Conservation Concern

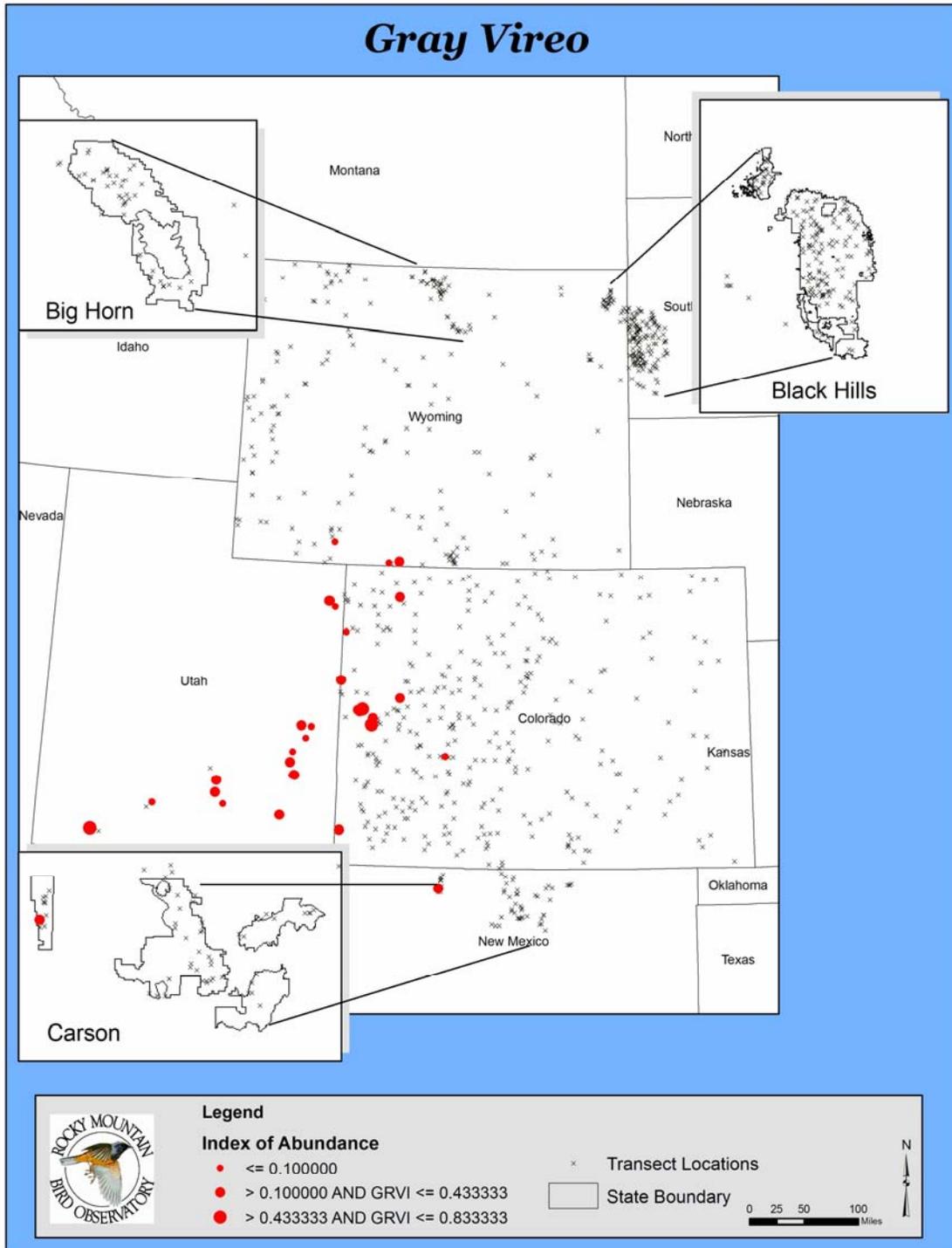
In 2005, three Gray Vireos were detected in pinyon-juniper habitat on the MBCNF project. In total, we detected Gray Vireo on four RMBO point-count transect monitoring projects and calculated a density estimate for pinyon-juniper habitat on the NCPN project.

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

Habitat	D	LCL	UCL	CV	n	N
PJ	ID	--	--	--	--	3

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 – In the southern Rocky Mountains, Gray Vireo nests almost exclusively in pinyon-juniper habitat, often with grasses, sagebrush, and desert scrub (Righter et al. 2004, Kingery 1998). It is believed to nest only in low-elevation pinyon-juniper, which may explain why it is not encountered more frequently on MBCNF transects (Righter et al. 2004). In 2004, a member of the RMBO field staff actually found a nest of this species on a transect, so it has been proven to breed in the CNF. A more intensive search in areas where this species has been detected on transects and in all low-elevation pinyon-juniper areas may be a good way to determine the status of Gray Vireo in the CNF.



Plumbeous Vireo
(*Vireo plumbeous*)

*PIF Regional Stewardship Species

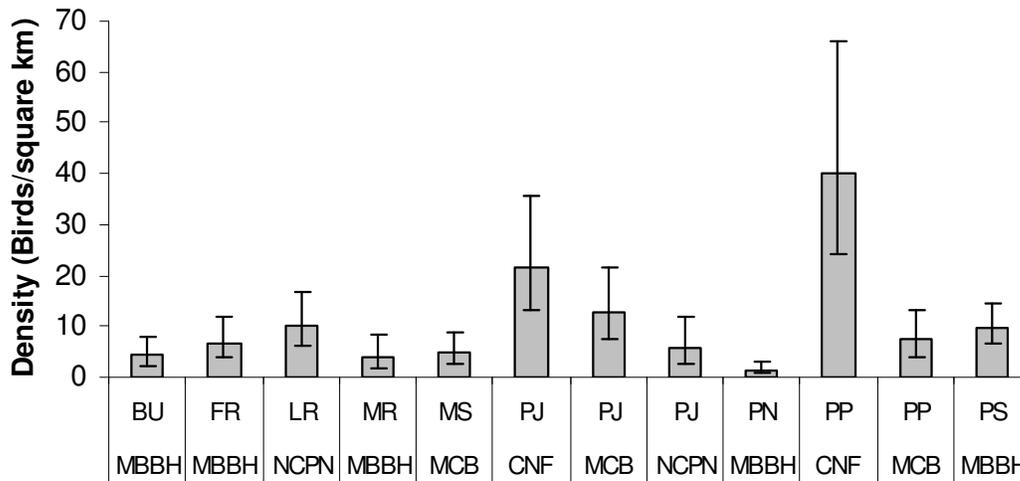
*NM-PIF Species of High Responsibility in Ponderosa Pine

In 2005, we detected 260 Plumbeous Vireos in four habitats on the MBCNF project. Overall, we detected this species on all five RMBO point-count transect monitoring projects and calculated density estimates in at least one habitat on the MBBH, MCB, MBCNF, and NCPN projects.

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

Habitat	D	LCL	UCL	CV	n	N
MC	ID	--	--	--	--	4
PJ	21.51	13.00	35.58	25.6%	148	148
PP	40.04	24.33	65.89	24.5%	95	96
SA	ID	--	--	--	--	12

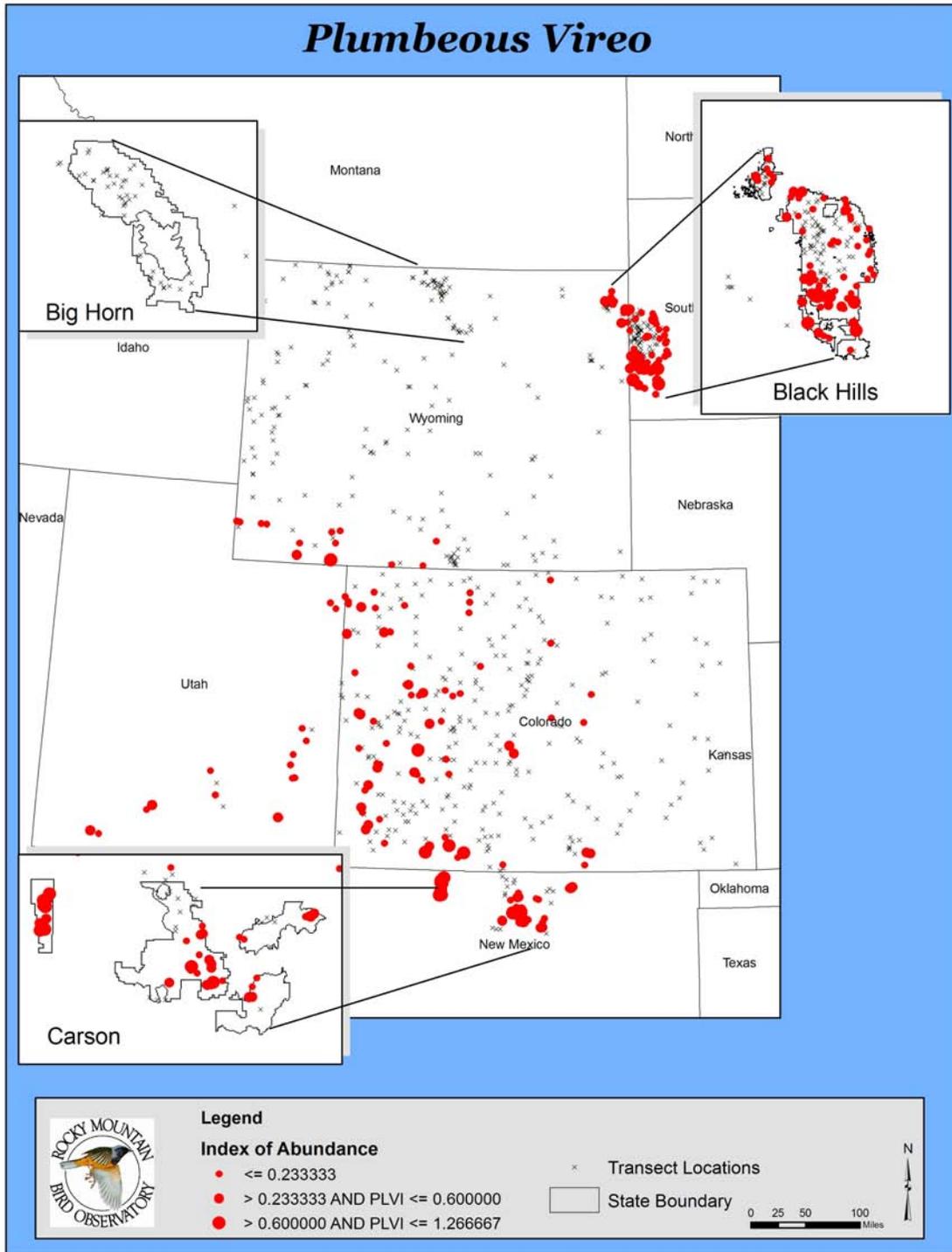
D = Density (birds/square kilometer); LCL = lower 95% confidence interval of the density; UCL = upper 95% confidence interval of the density; CV(%) = coefficient of variation of the density; n = number of independent detections; N = number of individuals; ID = insufficient data.



Habitat and Project

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

Summary – Plumbeous Vireo nests in a variety of habitats, including pinyon-juniper, ponderosa pine, and riparian cottonwood galleries, but it appears to reach its highest density in ponderosa pine habitat in the CNF. This species should be effectively monitored under MBCNF by point transects in ponderosa pine and pinyon-juniper habitat.



Warbling Vireo (*Vireo gilvus*)

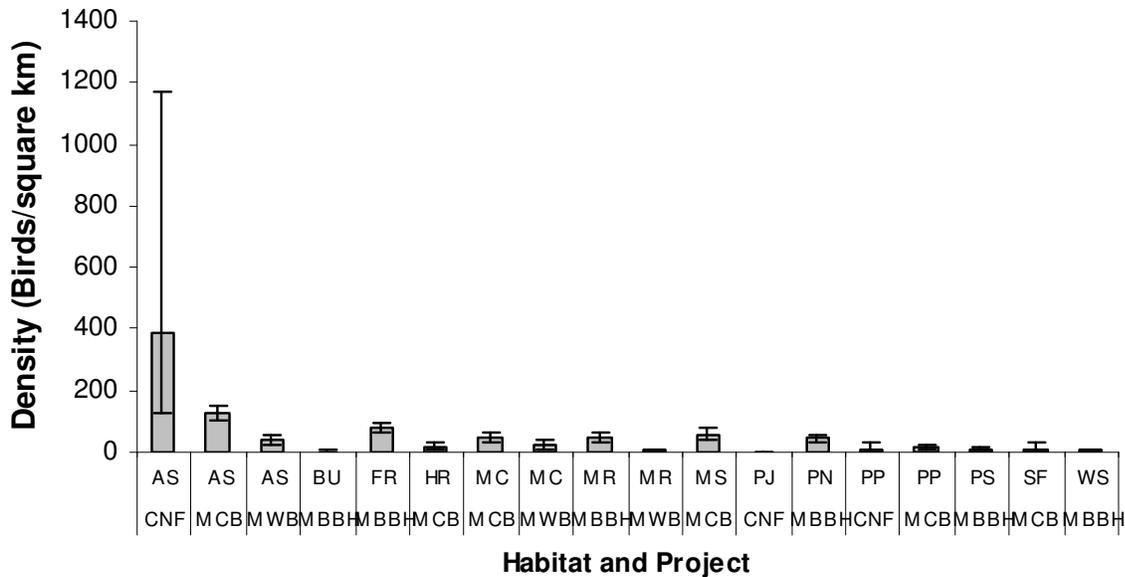
*PIF Regional Stewardship Species

In 2005, we detected 193 Warbling Vireos in five habitats on the MBCNF project. We recorded this species on all of the other RMBO point-transect monitoring projects, calculating density estimates in at least one habitat on all projects.

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

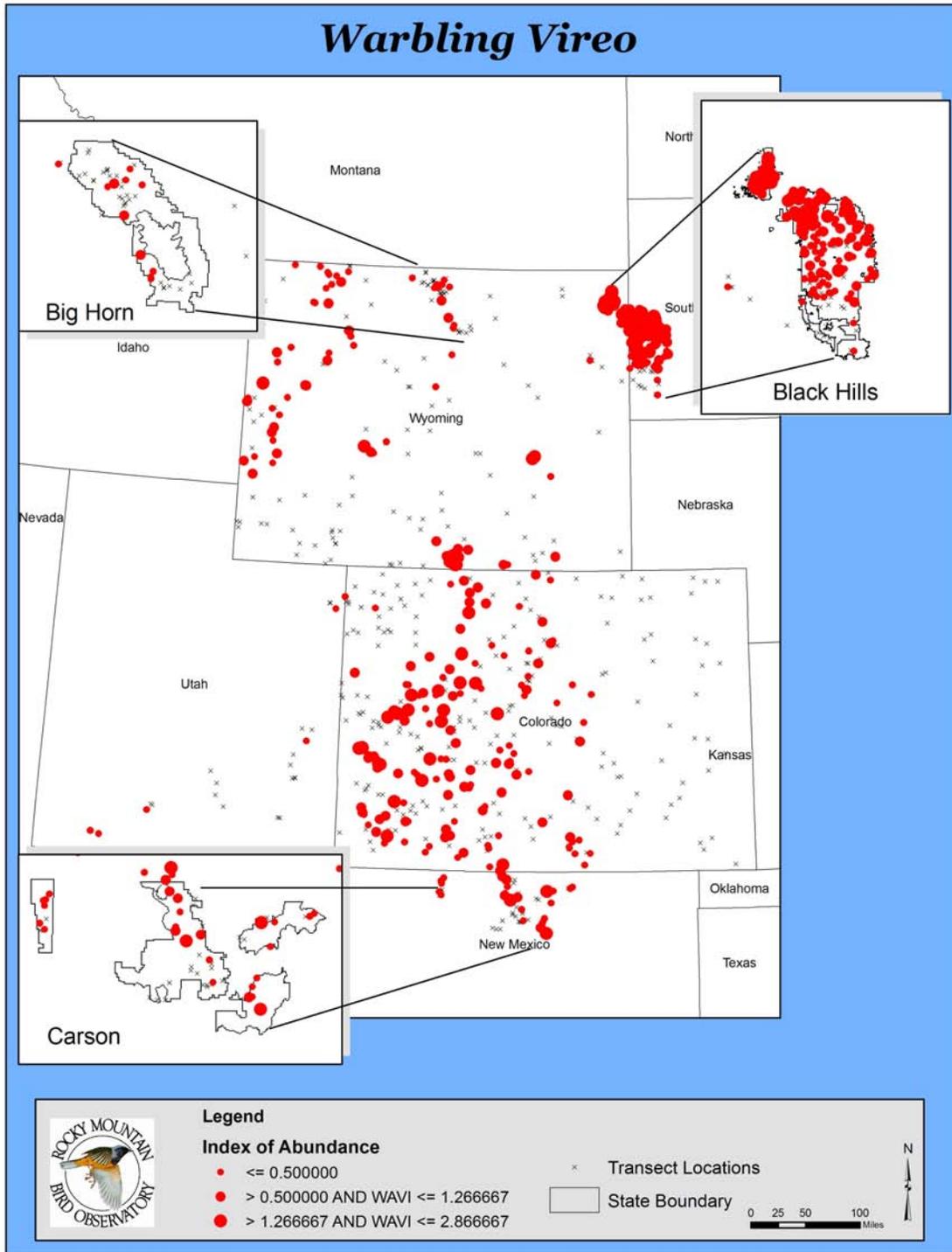
Habitat	D	LCL	UCL	CV	n	N
AS	389.50	129.62	1170.40	31.6%	24	26
MC	**	--	--	--	--	87
PJ	1.24	0.65	2.38	32.9%	33	33
PP	9.46	2.89	30.94	58.8%	37	39
SF	ID	--	--	--	--	9

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 measured distances.



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

Summary – Warbling Vireo nests in a variety of habitats including pinyon-juniper, ponderosa pine, and riparian cottonwood galleries. In 2005, we were able to calculate density estimates in aspen, pinyon-juniper, and ponderosa pine for Warbling Vireo. The density estimate that we are showing for aspen is most likely artificially high as a result of incorrect distance estimation. We have been able to estimate a density for this species in the previous two years in aspen, however, so we should be able to monitor this species in aspen. Overall, Warbling Vireo should be effectively monitored through point transects in four habitats under MBCNF.



Pinyon Jay
(*Gymnorhinus cyanocephalus*)

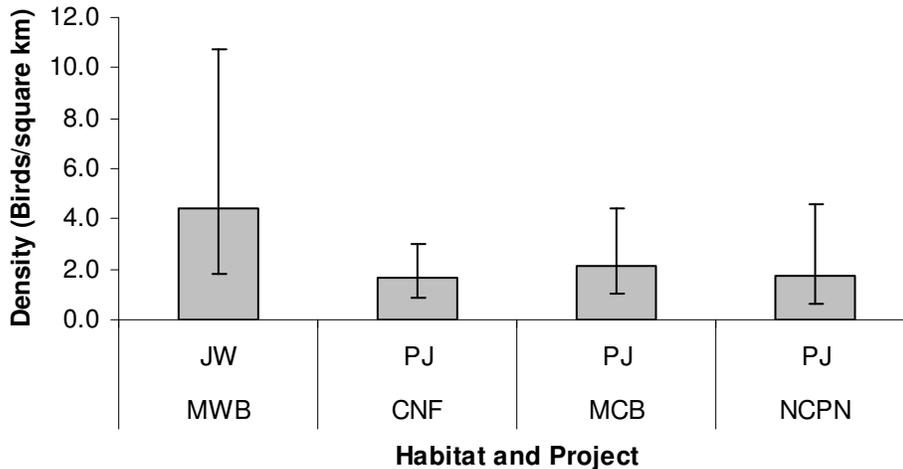
- *PIF Species of Continental Concern
- *PIF Species of Regional Concern
- *PIF Continental Stewardship Species
- *PIF Regional Stewardship Species
- *NM-PIF Species of High Responsibility for Pinyon-Juniper
- *USFWS Bird of Conservation Concern
- *NMDGF - Species of Greatest Conservation Need

In 2005, we detected 133 Pinyon Jays in three habitats on the MBCNF project. . In total, we recorded Pinyon Jay on all five RMBO point-transect monitoring projects and were able to calculate a density estimate in at least one habitat on three other projects.

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

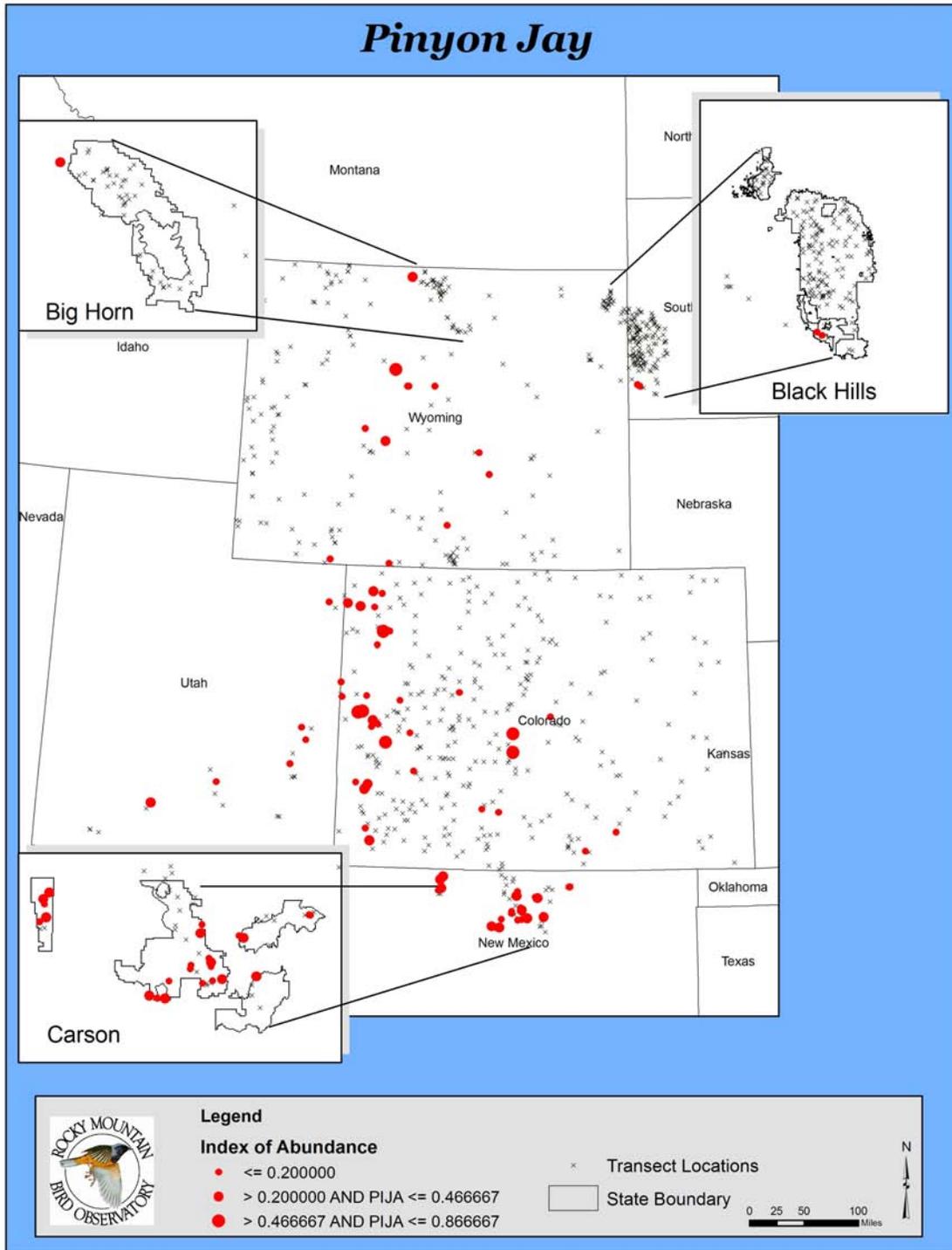
Habitat	D	LCL	UCL	CV	n	N
PJ	1.64	0.89	3.01	31.2%	51	82
PP	ID	--	--	--	--	15
SA	ID	--	--	--	19	35

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 Pinyon Jay among habitats for all RMBO point-count transect monitoring projects, 2005.

Summary – Pinyon Jay is rarely found in habitats other than pinyon-juniper and is an important seed disperser for pinyon pines, as it caches large amounts of seeds (Richter et al. 2004). Pinyon Jay should be effectively monitored through point transects in at least pinyon-juniper habitat under MBCNF. However, Pinyon Jay is an early season breeder and without noting juveniles, it is possible to calculate inflated density estimates.



Clark’s Nutcracker
(*Nucifraga columbiana*)

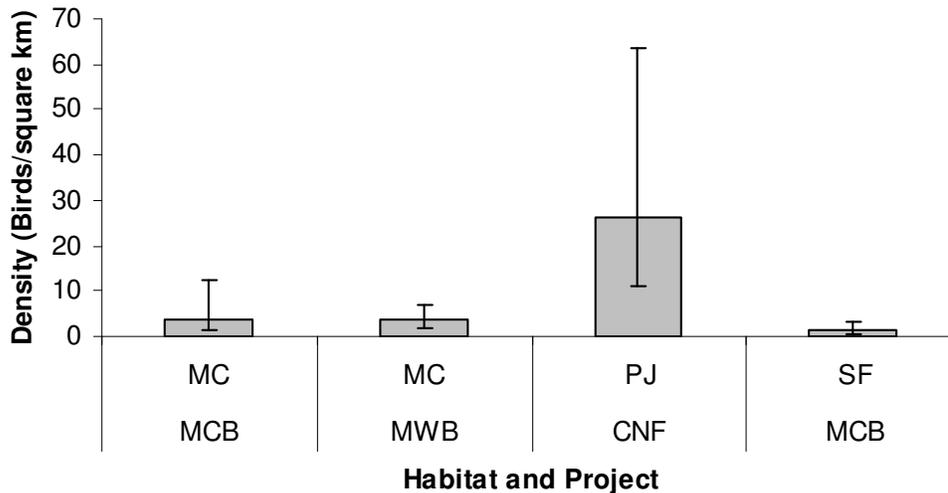
- *NM-PIF Priority management species for Mixed Conifer
- *NM-PIF Priority management species for Spruce-Fir
- *PIF Continental Stewardship Species
- *PIF Regional Stewardship Species

We detected 122 Clark’s Nutcrackers in six habitats and calculated a density estimate in pinyon-juniper habitat on the MBCNF project. In total, we detected Clark’s Nutcracker on all other RMBO point-count transect monitoring projects and calculated a density estimate in at least one habitat on two other projects.

Total number of independent detections, number of individuals, and habitat-specific density estimates for Clark’s Nutcracker for the MBCNF monitoring project, 2005.

Habitat	D	LCL	UCL	CV	n	N
AS	ID	--	--	--	--	5
GR	ID	--	--	--	--	1
MC	ID	--	--	--	--	3
PJ	26.41	11.01	63.38	45.2%	61	86
PP	ID	--	--	--	--	22
SF	ID	--	--	--	--	5

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 Clark’s Nutcracker among habitats for all RMBO point-count transect monitoring projects, 2005.

Summary – Clark’s Nutcracker nests in a variety of coniferous habitats, but is most often associated with pinyon habitat, whether or not it is nesting, as it relies extensively on pinyon seeds (Kingery 1998). Clark’s Nutcracker should be effectively monitored through point transects under MBCNF in pinyon-juniper habitats. However, Clark’s Nutcracker is an early season breeder and without noting juveniles, it is possible to calculate inflated density estimates.

