

Brown Creeper
(*Certhia Americana*)

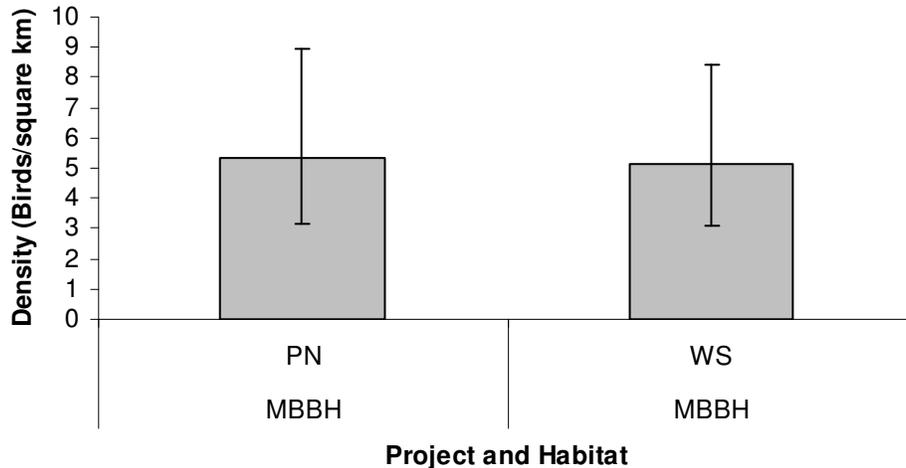
*NM-PIF Representative Species for Spruce-Fir

In 2005, we 10 detected Brown Creeper in three habitats on the MBCNF project. In total, we detected Brown Creeper on four of the five RMBO point-count transect monitoring projects. Detections of the species were sufficient to calculate density only in ponderosa pine and white spruce habitats on the MBBH project.

Total number of detections, number of individuals, and habitat-specific density estimates for Brown Creeper on the MBCNF monitoring project, 2005.

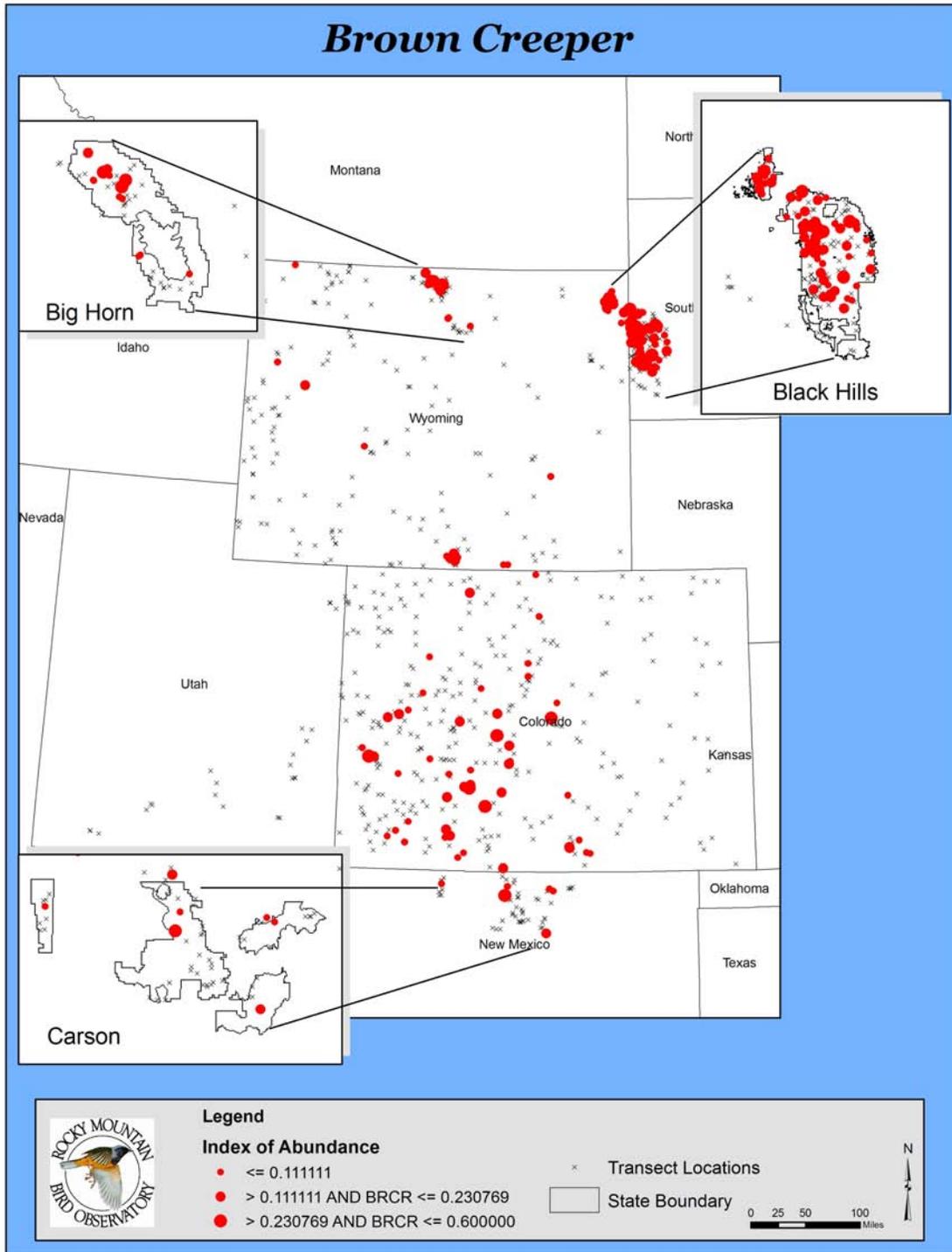
| Habitat | D | LCL | UCL | CV | n | N |
|---------|----|-----|-----|----|----|---|
| MC | ID | -- | -- | -- | -- | 6 |
| PP | ID | -- | -- | -- | -- | 1 |
| SF | ID | -- | -- | -- | -- | 3 |

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.



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

Summary – Brown Creeper is believed to be dependent on mature or old-growth spruce-fir forests and avoids deciduous forests (Cornell 2003). Brown Creeper is not effectively monitored through point transects in any one habitat or across habitats under MBCNF. Given interest, however, 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.



Rock Wren
(*Salpinctes obsoletus*)

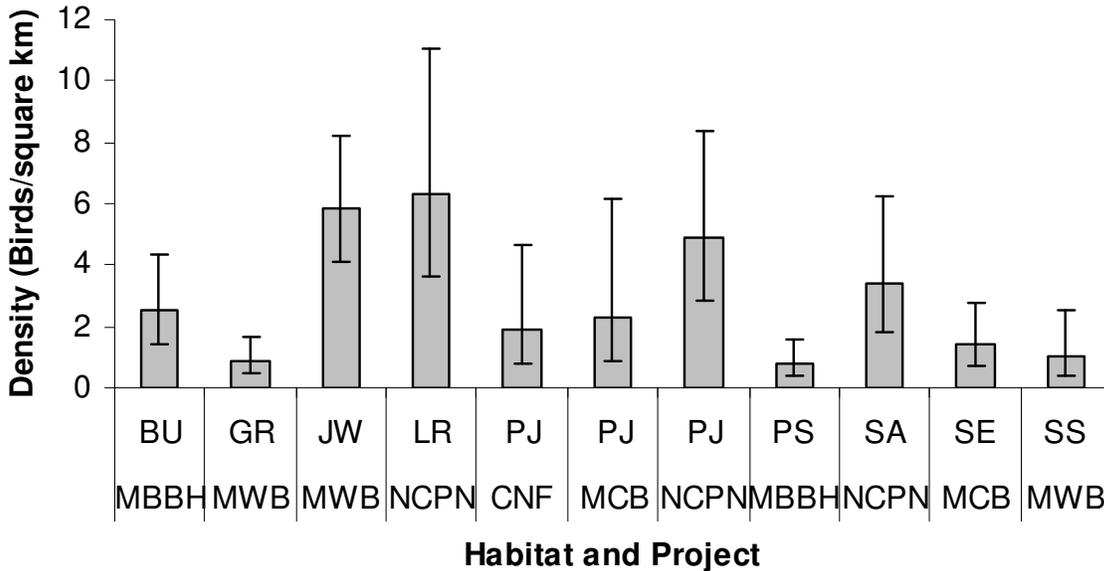
*PIF Regional Stewardship Species
*NM-PIF Species of High Responsibility for Montane Shrub,
Great Basin Desert Shrub and Cliff/Cave/Rock

In 2005, we 59 detected Rock Wrens in three habitats on the MBCNF project and were able to calculate a density estimate in pinyon-juniper. Overall, we detected Rock Wren on all RMBO point-count monitoring projects in 2005, and we detected this species in sufficient numbers to calculate a density estimate in at least one habitat on each project.

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

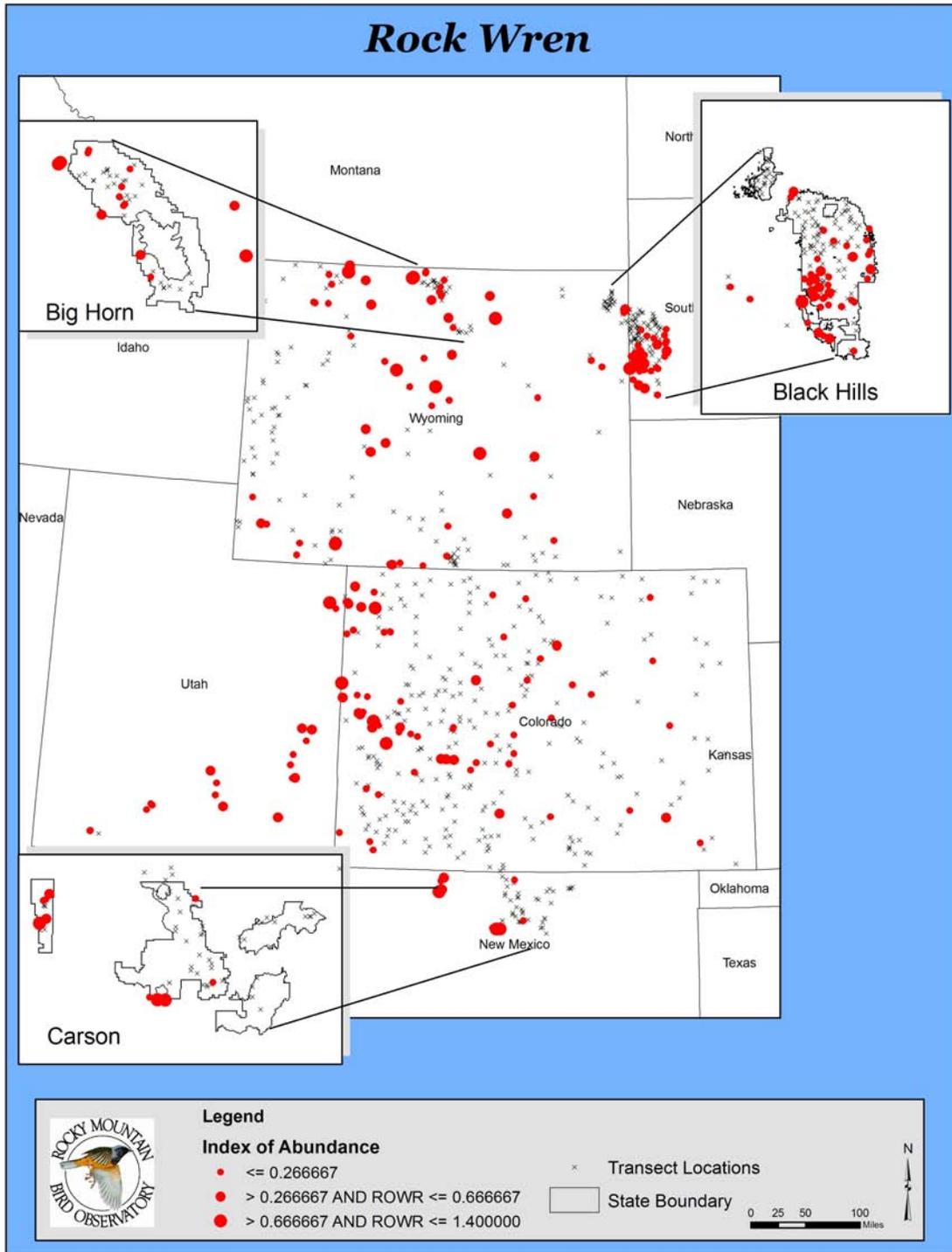
| Habitat | D | LCL | UCL | CV | n | N |
|---------|------|------|------|-------|----|----|
| GR | ID | -- | -- | -- | -- | 1 |
| PJ | 1.87 | 0.76 | 4.64 | 47.0% | 47 | 53 |
| SA | ID | -- | -- | -- | -- | 5 |

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 Rock Wren among habitats for all RMBO point-count transect monitoring projects, 2005.

Summary – Rock Wren is found in arid or semi-arid areas, in rocky canyons and cliffs, on rock slides and boulder-strewn slopes, and in arroyos with sparse vegetation (Kingery 1998). Rock Wren should be effectively monitored through point transects under MBCNF in pinyon-juniper habitat.



Canyon Wren
(*Catherpes mexicanus*)

*PIF Species of Regional Concern

*NM-PIF Species of High Responsibility for Cliff/Cave/Rock

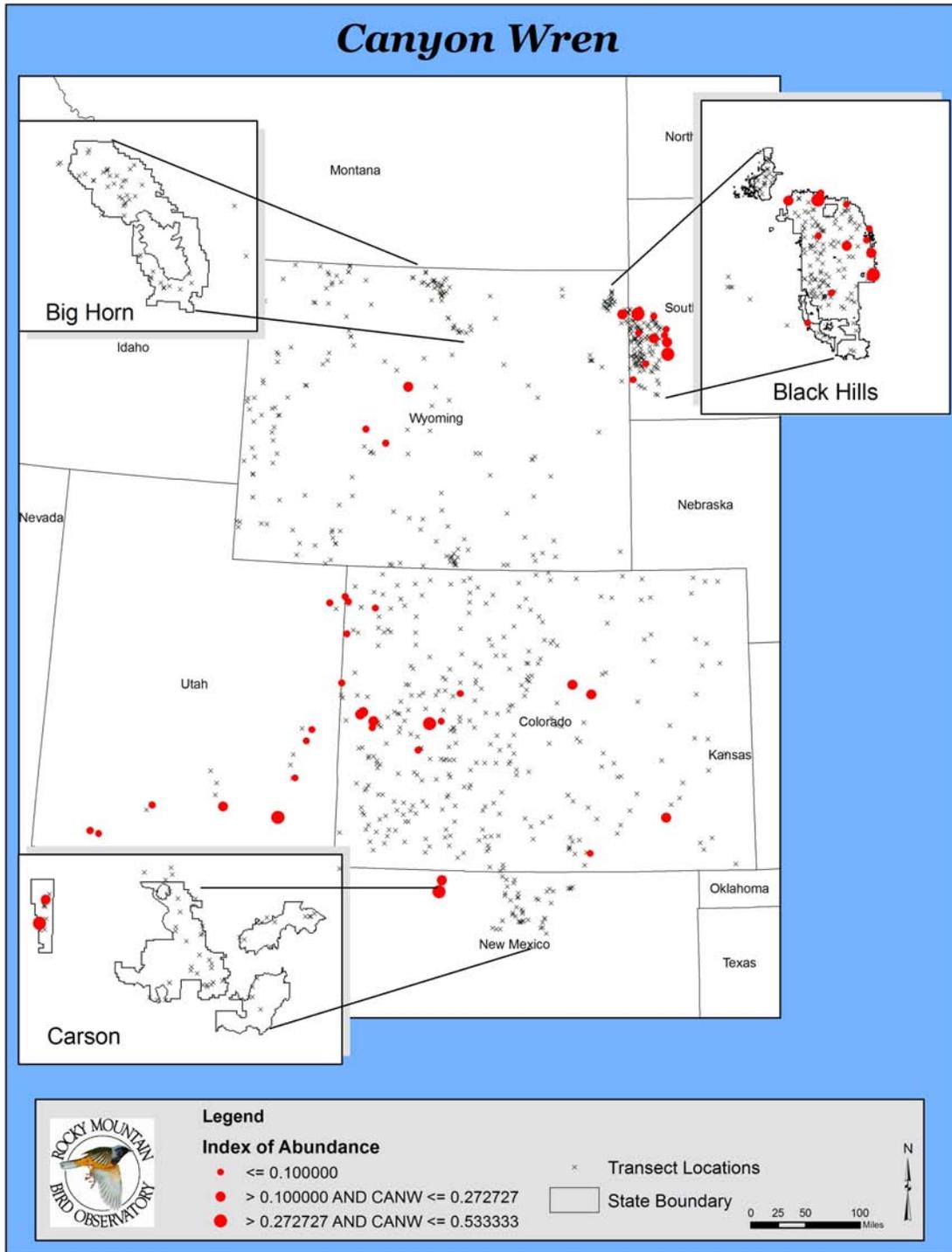
In 2005, we detected ten Canyon Wrens in pinyon-juniper habitat on the MBCNF project. Overall, we detected Canyon Wren on all RMBO point-count transect monitoring projects; however, NCPN is the only project that extensively samples canyons, consequently detections were sufficient to calculate a density estimate only on this project.

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

| Habitat | D | LCL | UCL | CV | n | N |
|---------|----|-----|-----|----|----|----|
| PJ | ID | -- | -- | -- | -- | 10 |

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 – Canyon Wrens breed in rocky areas, especially steep-sided canyons, with plenty of vertical surfaces with crevices in which to nest and search for prey (Kingery 1998). We detect this species every year in low numbers usually in pinyon-juniper habitat on the MBCNF project; however, Canyon Wrens are too rare and localized in the CNF to be adequately monitored by point transects in any habitat or across habitats. 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 and thereby generate an annual statewide density estimate that may be robust enough for population-trend monitoring.



Golden-crowned Kinglet (*Regalus satrapa*)

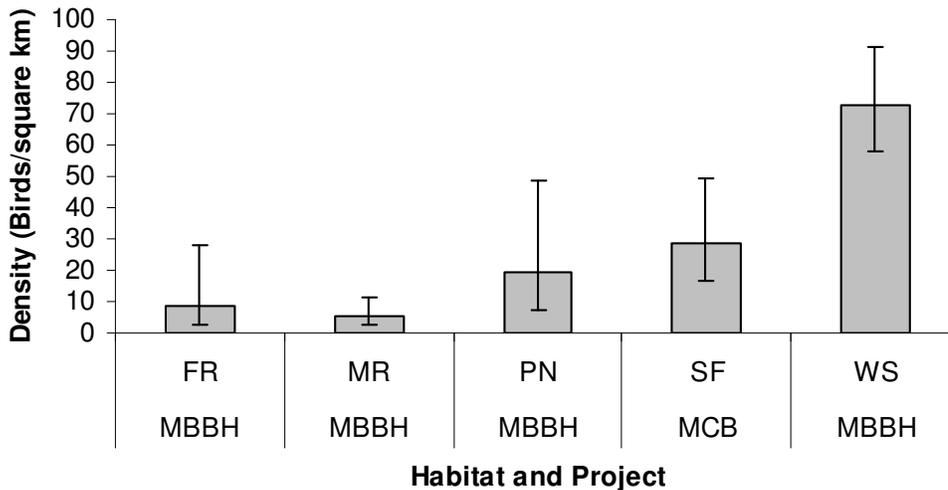
*NM-PIF Habitat Representative Species for Spruce-Fir

In 2005, we detected ten Golden-crowned Kinglet in two habitats on the MBCNF project. Overall, Golden-crowned Kinglet was detected on four of five RMBO point-count transect monitoring projects and density estimates were calculated in four habitats on the MBBH project and in one habitat on the MCB project.

Total number of independent detections, number of individuals, and habitat-specific density estimates for Golden-crowned Kinglet for the MBBH monitoring project, 2005.

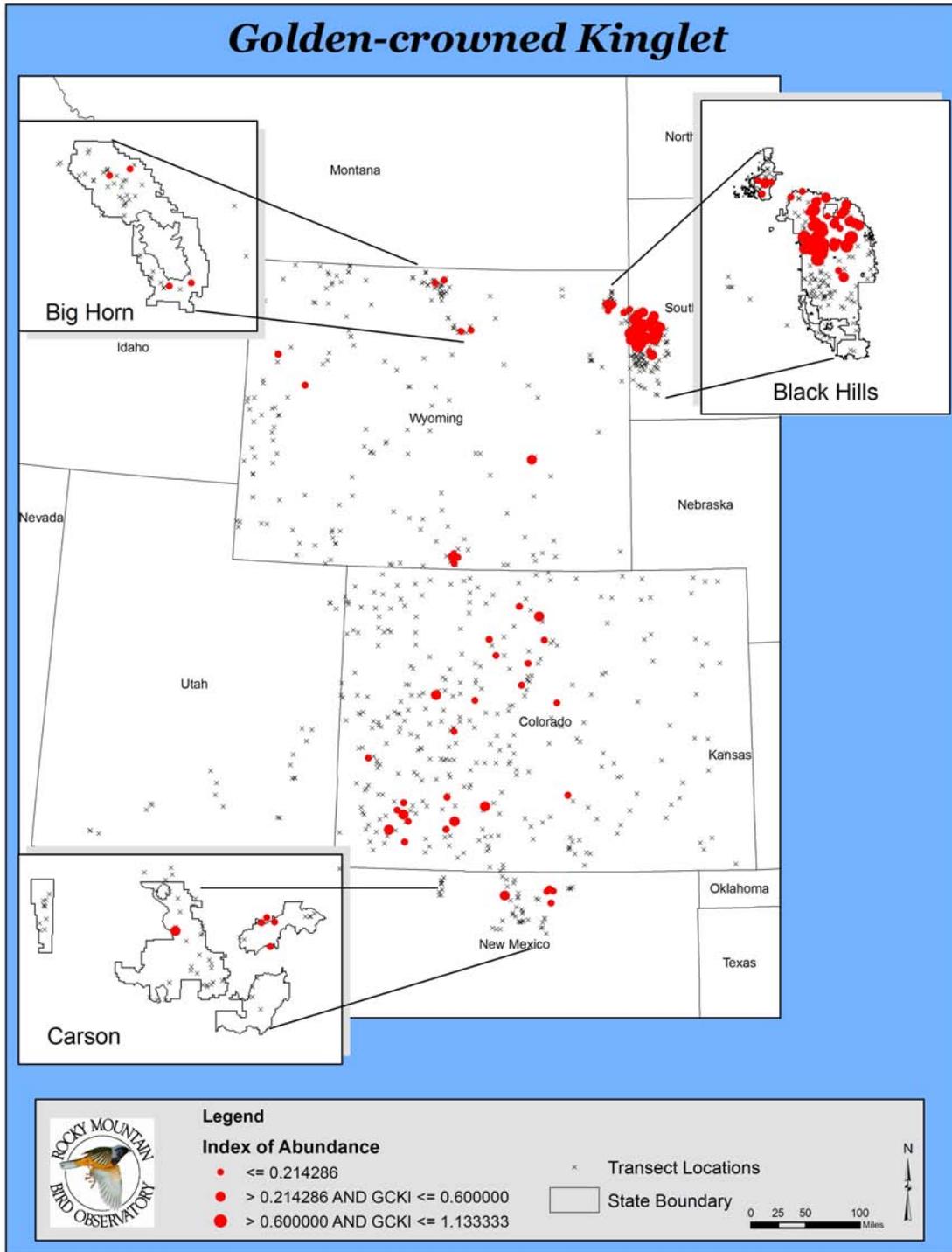
| Habitat | D | LCL | UCL | CV | n | N |
|---------|----|-----|-----|----|----|---|
| MC | ID | -- | -- | -- | -- | 6 |
| SF | ID | -- | -- | -- | -- | 4 |

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.



Relative density of Golden-crowned Kinglet among habitats for all RMBO point-count transect monitoring projects, 2005.

Summary – Golden-crowned Kinglet prefers high-elevation coniferous forests and appears to be sensitive to habitat fragmentation (Audubon 2002). We detect Golden-crowned Kinglets primarily in spruce-fir and mixed conifer habitats on the MBCNF project; however, Golden-crowned Kinglet 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.



Blue-gray Gnatcatcher (*Polioptila caerulea*)

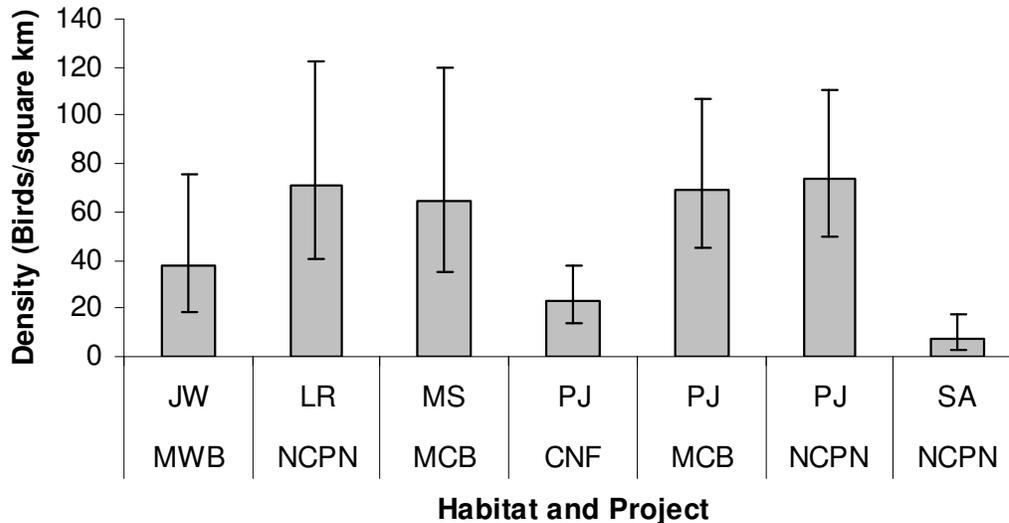
*NM-PIF Habitat Representative Species

We detected 111 Blue-gray Gnatcatchers in pinyon-juniper, ponderosa pine, and sage shrubland habitats in 2005 on the MBCNF project. In total, we detected Blue-gray Gnatcatchers on four of the RMBO point-count transect monitoring projects and calculated density estimates in at least one habitat for each of these projects.

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

| Habitat | D | LCL | UCL | CV | n | N |
|---------|-------|-------|-------|-------|----|----|
| PJ | 23.15 | 14.27 | 37.56 | 24.4% | 75 | 83 |
| PP | ID | -- | -- | -- | -- | 14 |
| SA | ID | -- | -- | -- | -- | 14 |

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 Blue-gray Gnatcatcher among habitats for all RMBO point-count transect monitoring projects, 2005.

Summary – Blue-gray Gnatcatchers are most frequently encountered in pinyon-juniper habitat but can be found in any low-elevation areas with an abundance of shrubs. This species should be effectively monitored through point transects in pinyon-juniper habitat on the MBCNF project.

