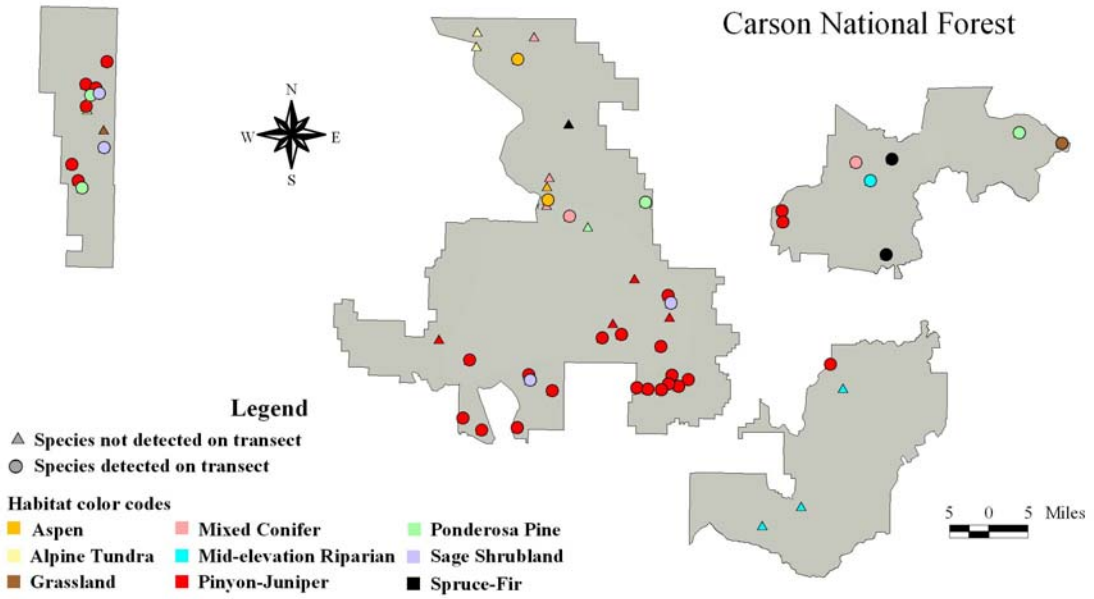
Common Raven



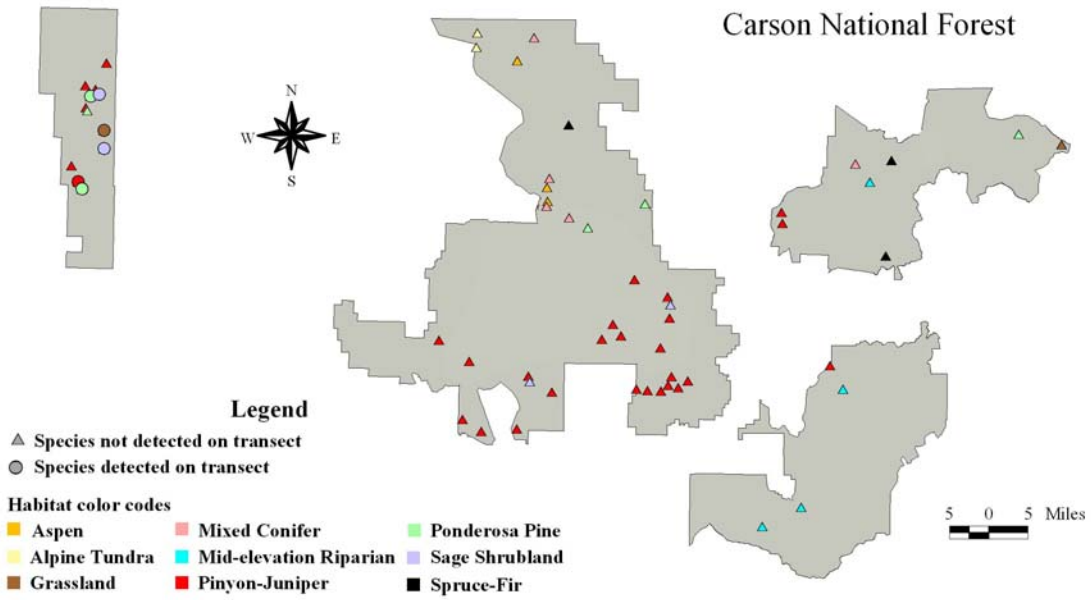
We recorded Common Ravens in all habitats except Alpine Tundra and detected sufficient numbers in Pinyon-Juniper habitat (84) to estimate a density. However, we detected only 71 on points in that habitat and used these to generate our density estimate.

Habitat-specific density estimates for Common Raven in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
AS	ID	--	--	--	3
GR	ID	--	--	--	6
MC	ID	--	--	--	4
MR	ID	--	--	--	2
PJ	0.0050	0.0036	0.0070	17%	71
PP	ID	--	--	--	14
SA	ID	--	--	--	10
SF	ID	--	--	--	4

D=Density in birds/hectare; LCL=lower confidence limit on D;
UCL=upper confidence limit on D; CV=coefficient of variation on D;
n=number of observations; ID=insufficient data

Purple Martin



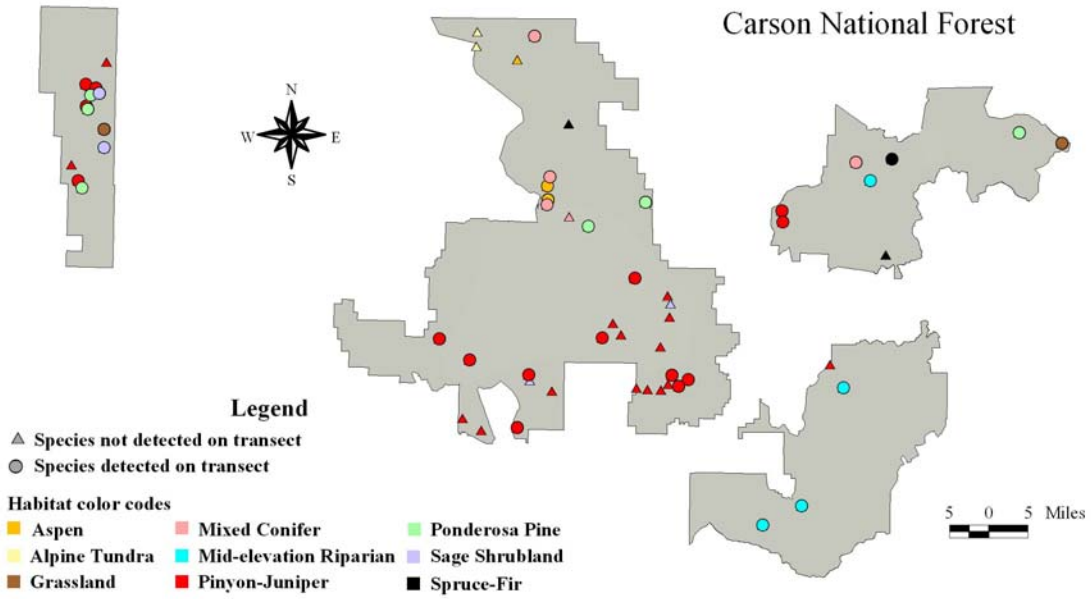
RMBO field workers detected 13 Purple Martins across four habitats in the western section of the CNF during the summer of 2003. This species is an obligate secondary cavity-nester and relies on other species, such as Hairy Woodpeckers to construct cavities. In western Colorado, Purple Martins use stands of large Aspen for nesting. If Purple Martins are nesting in this area of the CNF, they may be using Ponderosa Pines as limited aspen is present in this section of the forest. Purple Martin is classified as a sensitive species in the U.S. Forest Service Region 2, which is adjacent to Region 3, and is monitored by RMBO's special species program in Colorado.

Observations of Purple Martin in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV(%)	n
GR	ID	--	--	--	1
PJ	ID	--	--	--	2
PP	ID	--	--	--	8
SA	ID	--	--	--	2

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Violet-green Swallow



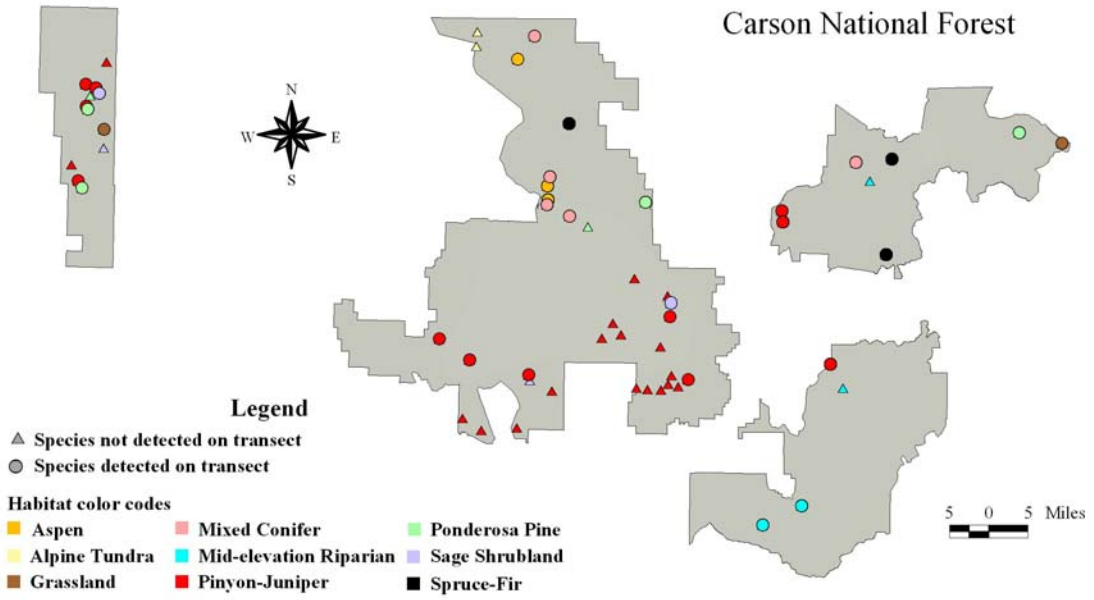
Violet-green Swallows were detected in all habitats except Alpine Tundra during the summer of 2003. We were able to provide a density estimate in Pinyon-Juniper. Violet-green Swallow is listed as a species of High Responsibility by NMPIF in Mixed Conifer and Mid-elevation Riparian habitats. This species is also a cavity-nester that feeds upon insects.

Habitat-specific density estimates for Violet-green Swallow in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
AS	ID	--	--	--	7
GR	ID	--	--	--	11
MC	ID	--	--	--	12
MR	ID	--	--	--	6
PJ	0.0295	0.0183	0.0475	25%	38
PP	ID	--	--	--	20
SA	ID	--	--	--	7
SF	ID	--	--	--	1

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Mountain Chickadee

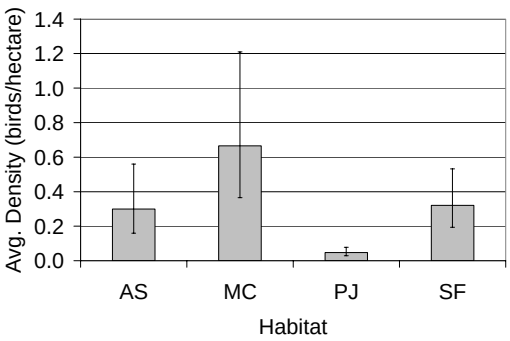


RMBO staff detected Mountain Chickadees in all habitats except for Alpine Tundra. We were able to obtain density estimates for this species in Aspen, Mixed Conifer, Pinyon-Juniper, and Spruce-Fir. Yet another cavity-nesting species, Mountain Chickadees rely on cavities made by other species in which to nest.

Habitat-specific density estimates for Mountain Chickadee in the Carson National Forest, summer 2003

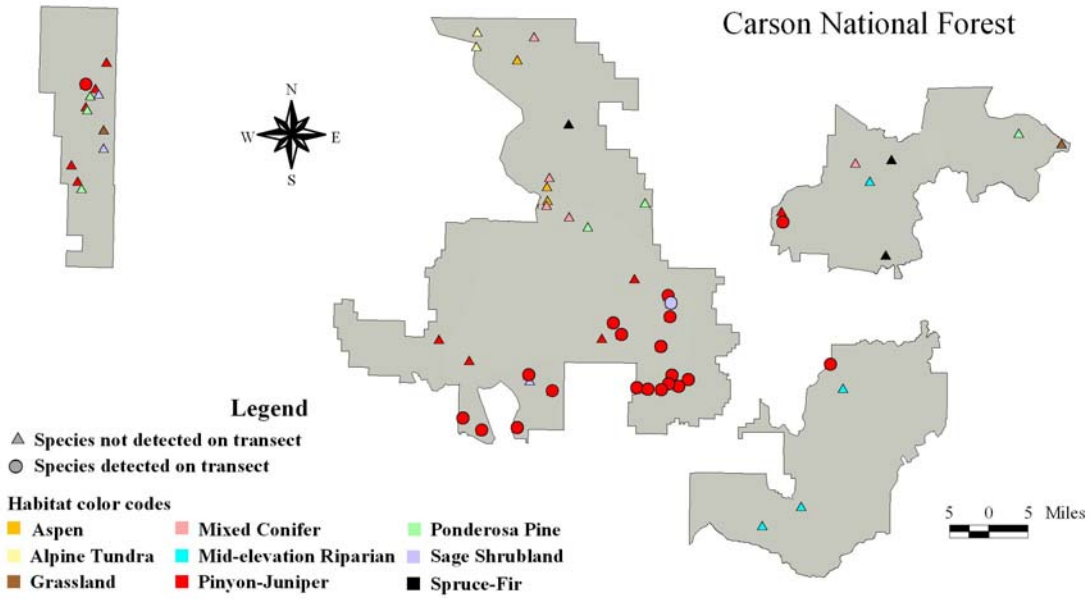
HABITAT	D	LCL	UCL	CV	n
AS	0.2989	0.1595	0.5601	32%	31
GR	ID	--	--	--	3
MC	0.6652	0.3655	1.2105	31%	24
MR	ID	--	--	--	12
PJ	0.0472	0.0286	0.0779	26%	35
PP	ID	--	--	--	12
SA	ID	--	--	--	4
SF	0.3206	0.1932	0.5319	26%	36

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data



Relative density of Mountain Chickadee among habitats in the Carson National Forest, summer 2003.

Juniper Titmouse



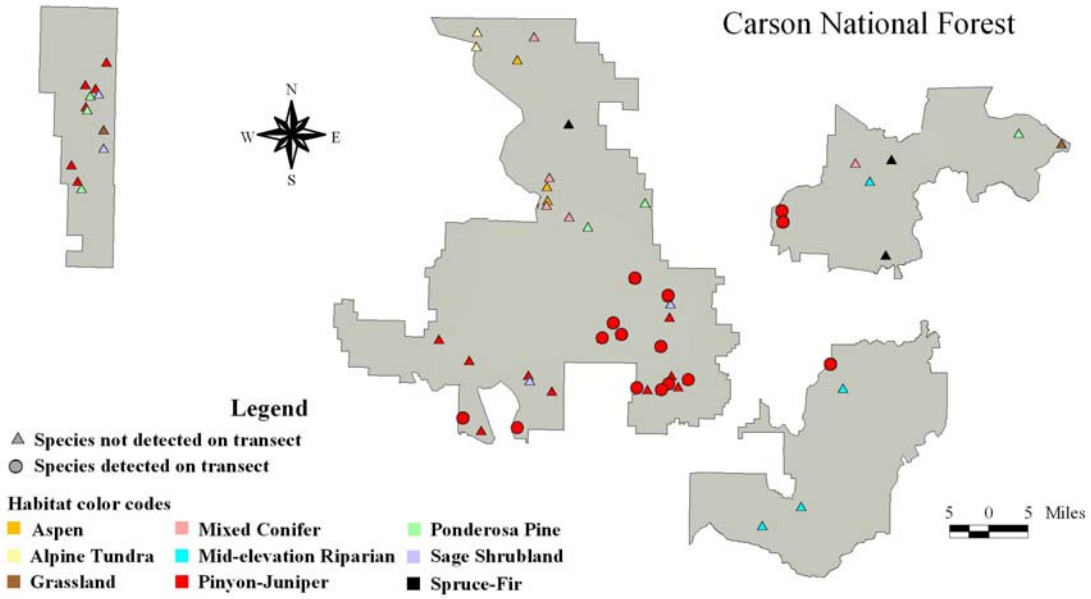
Juniper Titmouse is found exclusively in Pinyon-Juniper and is also a cavity-nesting species dependent on cavities made by other species. We obtained a density estimate for this species in the Pinyon-Juniper habitat. This species is listed by NMPIF as a High Responsibility management species for the state of New Mexico. Our efforts to monitor this species will show population trends as it is uncertain how populations of this species will react to the Pinyon Pine die-off.

Habitat-specific density estimates for Juniper Titmouse in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
PJ	0.1767	0.1372	0.2274	13%	138
SA	ID	--	--	--	2

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Bushtit



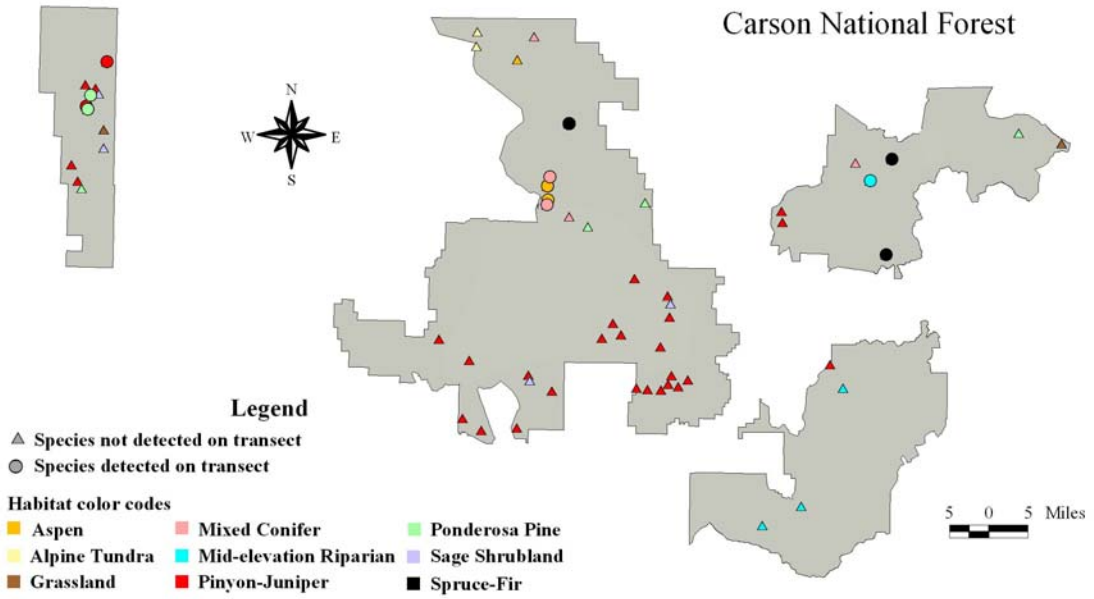
We detected 96 total Bushtits on 19 Pinyon-Juniper transects during the summer of 2003. We did not use detections from between points on the line transect in our density estimation as our density estimate using birds detected on points alone were sufficient to generate a low CV. We did not detect this species in other habitats besides Pinyon-Juniper.

Habitat-specific density estimates for Bushtit in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
PJ	0.1856	0.1107	0.3112	27%	55

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Red-breasted Nuthatch



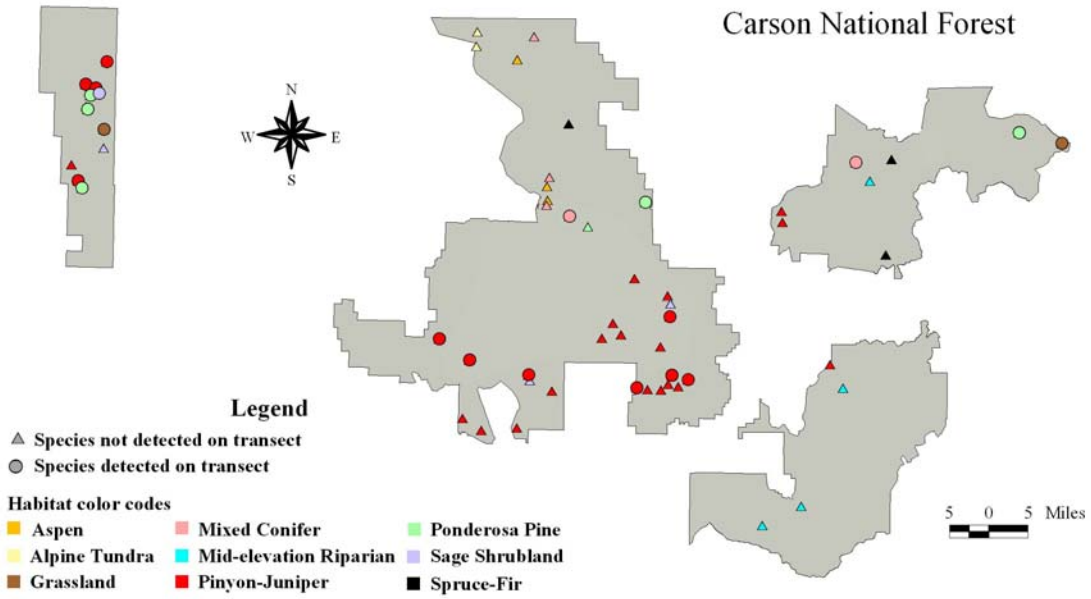
A total of 29 Red-breasted Nuthatches were detected in six habitat types. Nine Red-breasted Nuthatches were detected in Spruce Fir habitat. This is a representative species for the Mixed Conifer habitat according to the NMPIF. However, this species is increasing according to Breeding Bird Survey data.

Observations of Red-breasted Nuthatch in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV(%)	n
AS	ID	--	--	--	6
MC	ID	--	--	--	4
MR	ID	--	--	--	1
PJ	ID	--	--	--	4
PP	ID	--	--	--	5
SF	ID	--	--	--	9

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

White-breasted Nuthatch



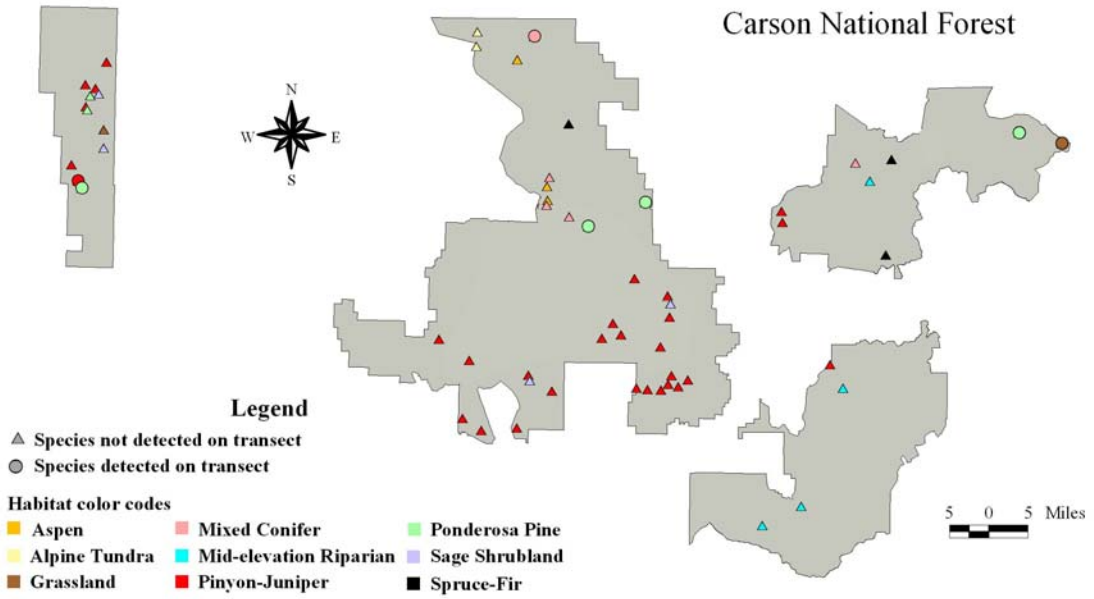
We recorded sufficient numbers of White-breasted Nuthatches in Pinyon-Juniper to provide a density estimate. We also recorded 22 White-breasted Nuthatches in Ponderosa Pine this season, which just missed our cut-off for minimum number of detections. According to Christmas Bird Count and Breeding Bird Survey data, this species is increasing.

Habitat-specific density estimates for White-breasted Nuthatch in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
GR	ID	--	--	--	4
MC	ID	--	--	--	3
PJ	0.0231	0.0124	0.0432	32%	27
PP	ID	--	--	--	22
SA	ID	--	--	--	1
SF	ID	--	--	--	1

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Pygmy Nuthatch



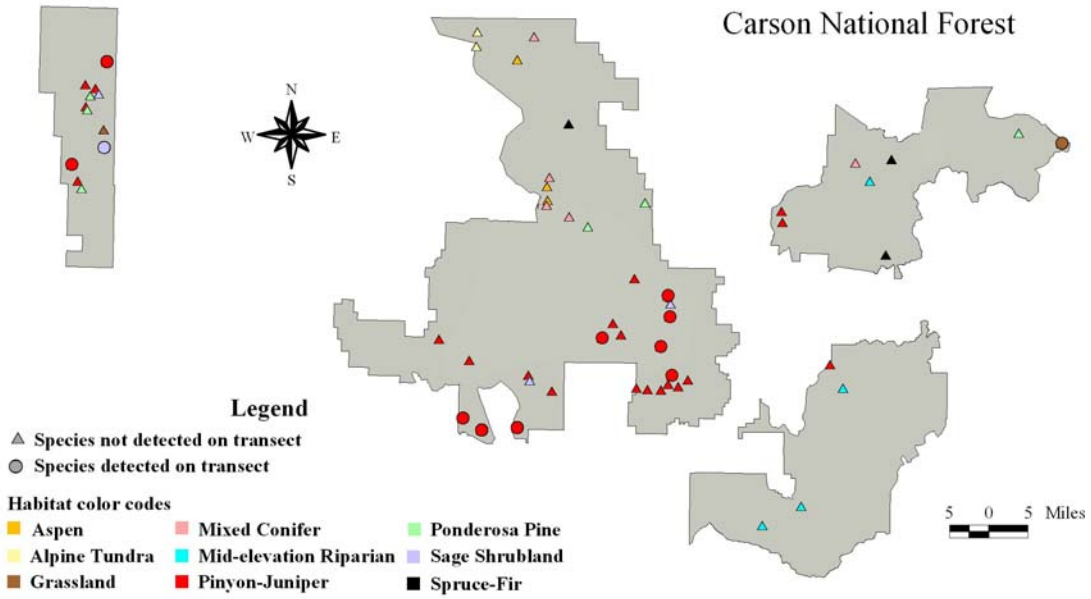
We detected Pygmy Nuthatches in four habitats in 2003, though we did not record this species in sufficient numbers in any one habitat to provide a density estimate. However, we did record 19 on six Ponderosa Pine transects. This species is listed as a Priority management species by NMPIF in Ponderosa Pine habitat. Nationally, Breeding Bird Survey data are insufficient to determine this species' population trend.

Observations of Pygmy Nuthatch in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV(%)	n
GR	ID	--	--	--	10
MC	ID	--	--	--	2
PJ	ID	--	--	--	1
PP	ID	--	--	--	19

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Rock Wren



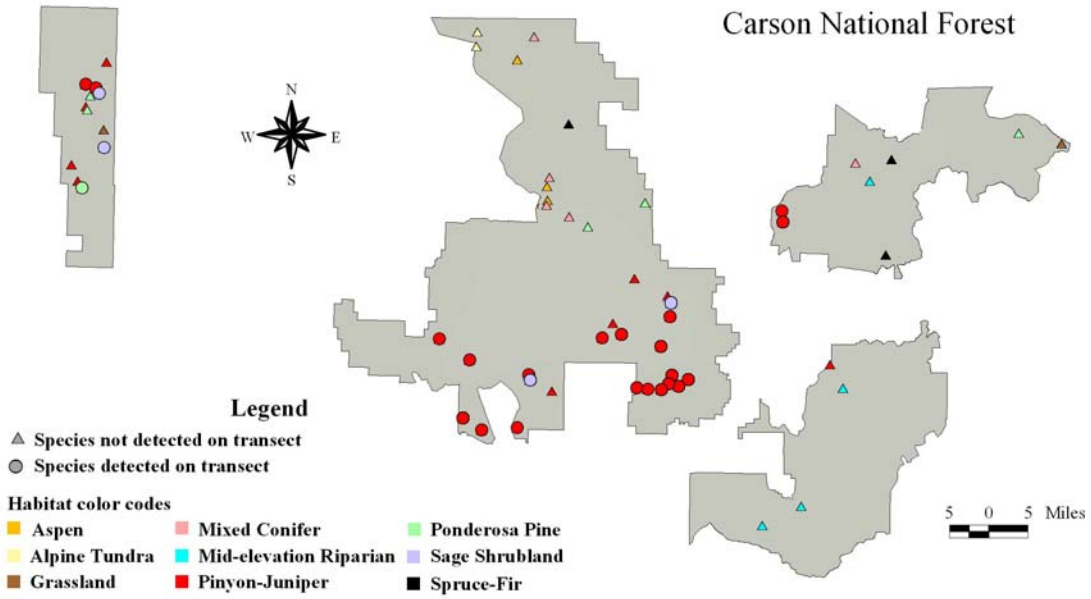
Rock Wrens were recorded in four habitats during the summer of 2003. We were able to calculate a density estimate for this species in Pinyon-Juniper and detected 45 individuals in this habitat. This species is listed by NMPIF as High Responsibility in Great Basin Desert Shrub (Sage) and Montane Shrub. We also detected 9 Rock Wrens on Sage transects this season.

Habitat-specific density estimates for Rock Wren in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
AT	ID	--	--	--	2
GR	ID	--	--	--	3
PJ	0.0140	0.0092	0.0212	21%	39
SA	ID	--	--	--	9

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Bewick's Wren



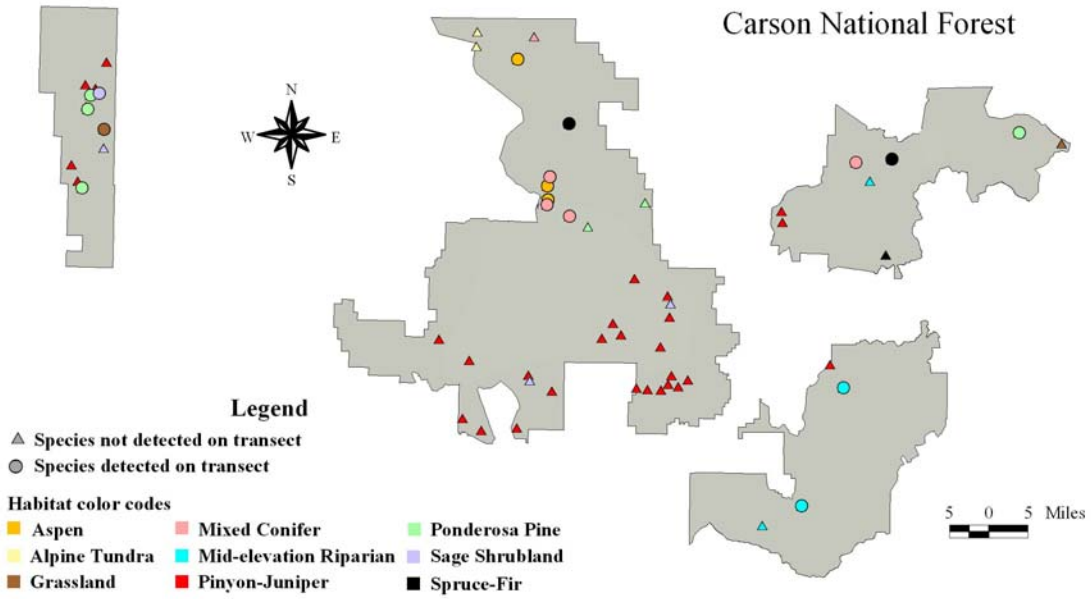
Bewick's Wrens are a common species in Pinyon-Juniper in the CNF. We recorded 112 Bewick's Wrens in Pinyon-Juniper habitat and were able to obtain a density estimate in this habitat. Fifteen Bewick's Wren were also recorded in Sage.

Habitat-specific density estimates for Bewick's Wren in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
PJ	0.0784	0.0581	0.1057	15%	111
PP	ID	--	--	--	2
SA	ID	--	--	--	15

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

House Wren



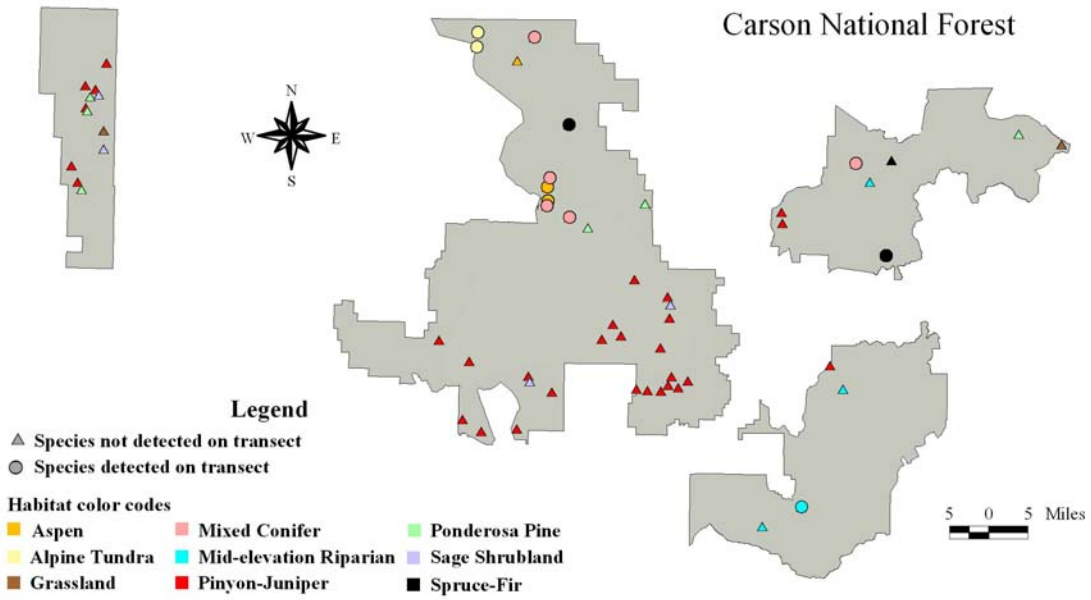
House Wrens were most common is Aspen habitat this season and we were able to obtain a density estimate in this habitat only. Overall, House Wrens were found in all habitats except for Alpine Tundra and Pinyon-Juniper. Populations of this species are stable and it is not listed as a species of management concern in any habitat.

Habitat-specific density estimates for House Wren in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
AS	0.1770	0.0922	0.3399	33%	29
GR	ID	--	--	--	3
MC	ID	--	--	--	14
MR	ID	--	--	--	5
PP	ID	--	--	--	10
SA	ID	--	--	--	3
SF	ID	--	--	--	6

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Ruby-crowned Kinglet

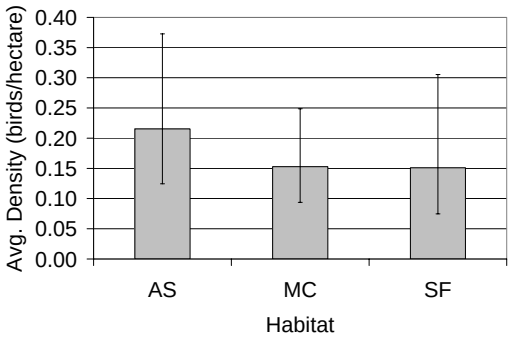


Ruby-crowned Kinglets are a common species of high-elevation forested areas. We detected sufficient numbers of Ruby-crowned Kinglets in three habitats to obtain distance estimates. These habitats were: Aspen, Mixed Conifer, and Spruce-Fir. Christmas Bird Count data shows that this species is increasing throughout the North America.

Habitat-specific density estimates for Ruby-crowned Kinglet in the Carson National Forest, summer 2003

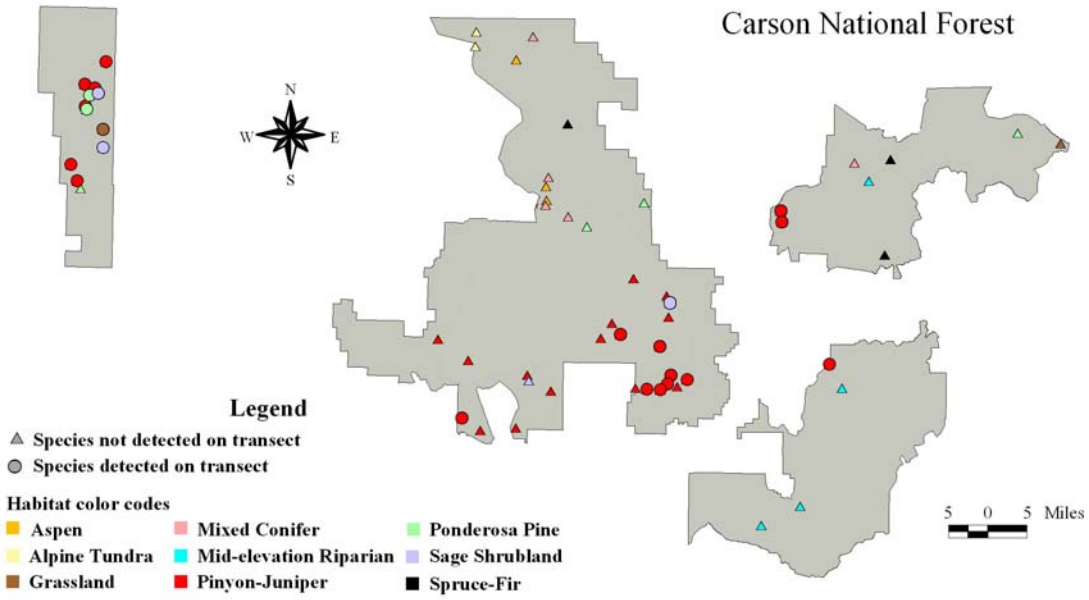
HABITAT	D	LCL	UCL	CV	n
AS	0.2153	0.1243	0.3728	28%	26
AT	ID	--	--	--	7
MC	0.1527	0.0938	0.2487	25%	39
MR	ID	--	--	--	1
SF	0.1511	0.0747	0.3055	36%	23

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data



Relative density of Ruby-crowned Kinglet among habitats in the Carson National Forest, summer 2003.

Blue-gray Gnatcatcher



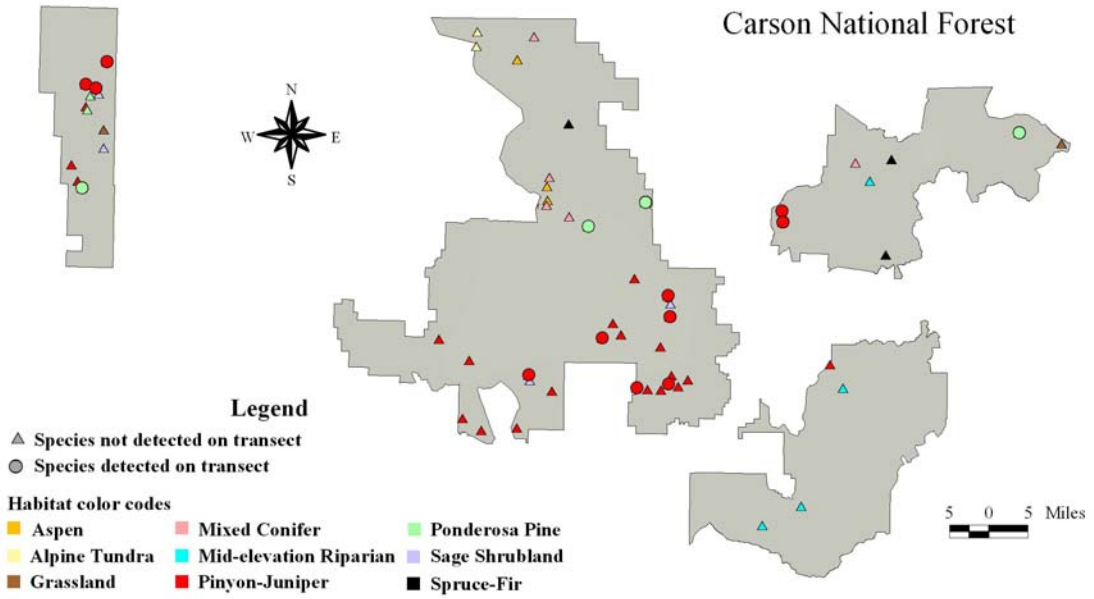
We detected 42 Blue-gray Gnatcatchers in Pinyon-Juniper habitat during the summer of 2003. This species occurs primarily in Pinyon-Juniper habitat throughout the western portion of its range. It may also be found in open Ponderosa Pine habitat where Pinyon Pine or Juniper trees are also found. Areas where this species can be found also typically have a significant understory shrub component. NMPIF lists this species as a representative species for Montane Shrub habitat. Data from the Breeding Bird Survey indicate that this species may be increasing.

Habitat-specific density estimates for Blue-gray Gnatcatcher in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
GR	ID	--	--	--	3
PJ	0.1233	0.0742	0.2049	26%	41
PP	ID	--	--	--	3
SA	ID	--	--	--	10

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Western Bluebird



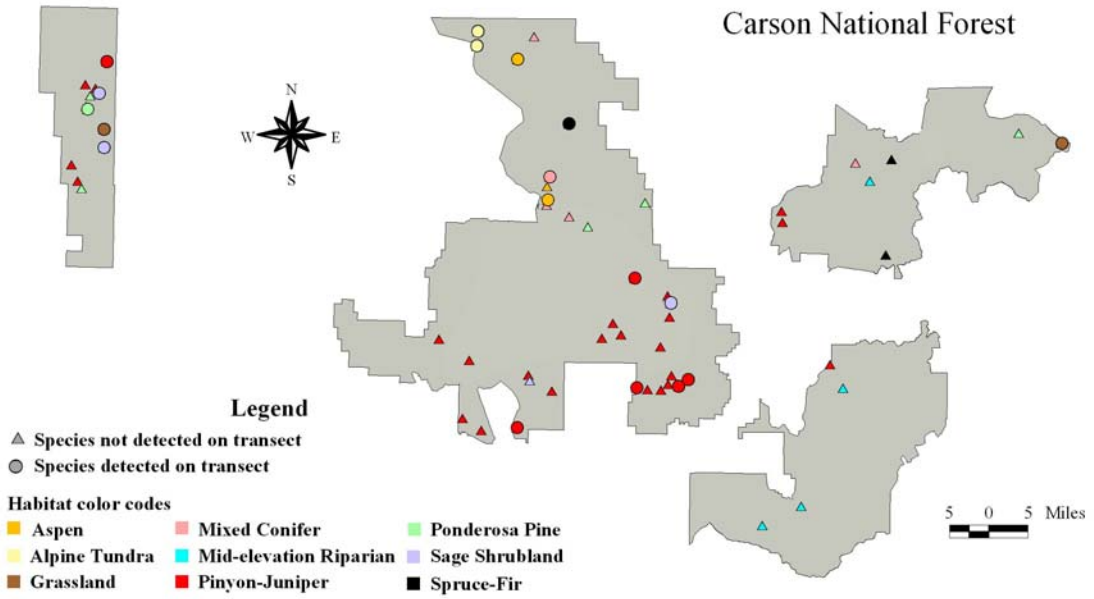
We detected 40 Western Bluebirds in two habitats during the summer of 2003. In Pinyon-Juniper, we detected 21 individuals and in Ponderosa Pine we detected 19. Western Bluebird is listed as a Priority management species in both Pinyon-Juniper and Ponderosa Pine habitats by NMPIF. This species also uses cavities that are constructed by woodpeckers or flickers.

Observations of Western Bluebird in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV(%)	n
PJ	ID	--	--	--	21
PP	ID	--	--	--	19

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Mountain Bluebird



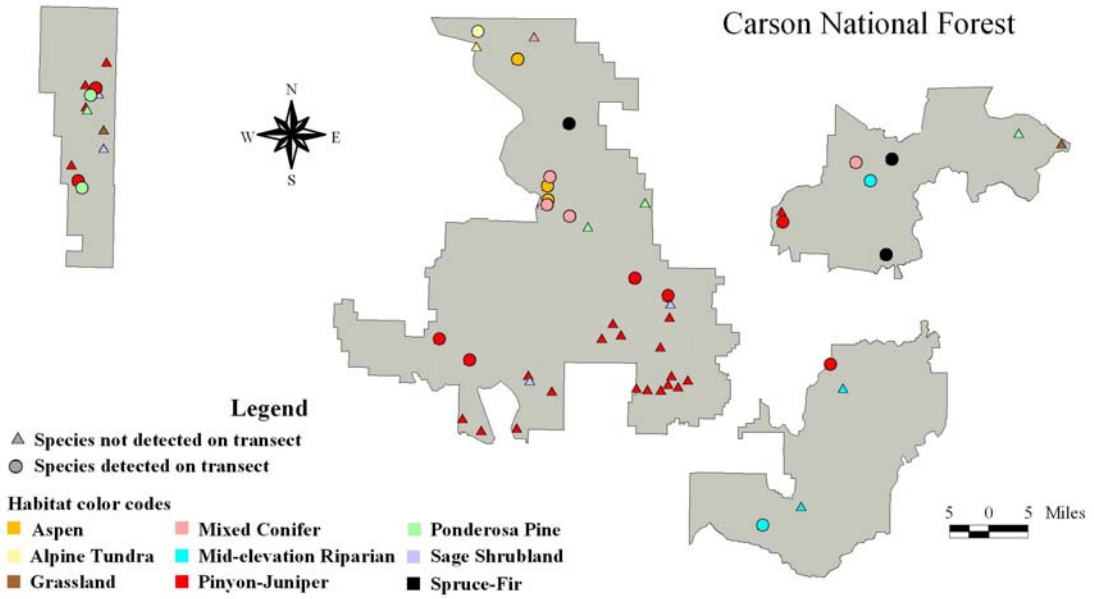
A total of 60 Mountain Bluebirds were detected during the summer of 2003, however, we did not record this species in sufficient numbers in any one habitat to provide estimate a density. Mountain Bluebird is listed as a Priority species in Alpine Tundra habitat by NMPIF where we detected 16 individuals on two transects. Mountain Bluebirds use cavities that are constructed by other species.

Observations of Mountain Bluebird in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV(%)	n
AS	ID	--	--	--	3
AT	ID	--	--	--	16
GR	ID	--	--	--	8
MC	ID	--	--	--	2
PJ	ID	--	--	--	20
PP	ID	--	--	--	1
SA	ID	--	--	--	8
SF	ID	--	--	--	2

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data

Hermit Thrush

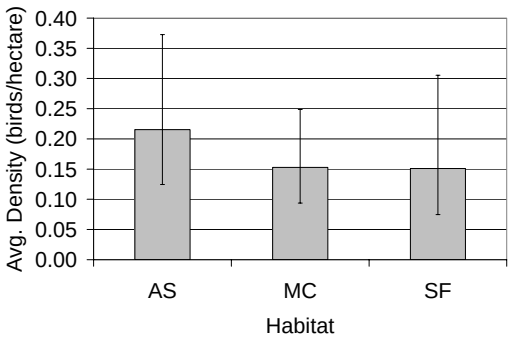


Hermit Thrush is a common forest species that we detected in seven habitats. We were able to estimate densities for Hermit Thrush in three habitats using the data gathered. These habitats were Aspen, Mixed Conifer, and Spruce-Fir. Hermit Thrush populations are stable or increasing throughout North America, possible because it does not migrate all of the way to the neotropics where extensive habitat destruction is occurring.

Habitat-specific density estimates for Hermit Thrush in the Carson National Forest, summer 2003

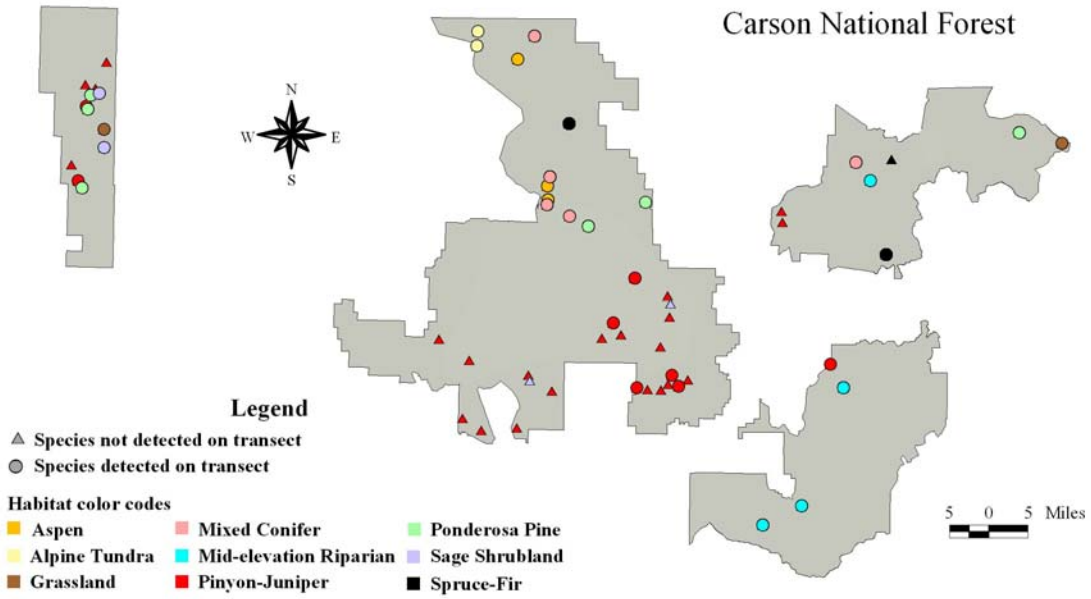
HABITAT	D	LCL	UCL	CV	n
AS	0.1168	0.0583	0.2343	36%	31
AT	ID	--	--	--	1
MC	0.0887	0.0466	0.1689	33%	29
MR	ID	--	--	--	3
PJ	ID	--	--	--	21
PP	ID	--	--	--	7
SF	0.0650	0.0302	0.1403	39%	26

D=Density in birds/hectare; LCL=lower confidence limit on D;
UCL=upper confidence limit on D; CV=coefficient of variation on D;
n=number of observations; ID=insufficient data



Relative density of Hermit Thrush among habitats in the Carson National Forest, summer 2003.

American Robin

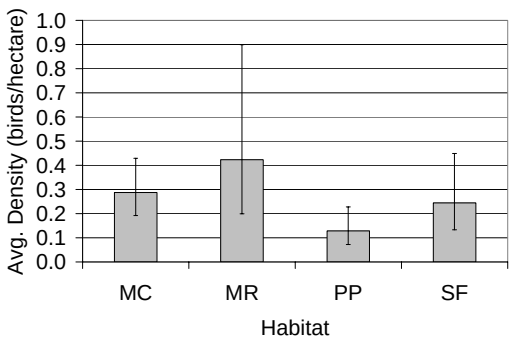


American Robin is a common species in forested areas throughout CNF and RMBO staff found it in every habitat that they surveyed this season. We detected 29 on Mid-elevation Riparian transects making this species the most common in that habitat. Our density estimates shows that American Robins may be most abundant in Mixed Conifer habitat followed by Spruce-Fir and Ponderosa Pine.

Habitat-specific density estimates for American Robin in the Carson National Forest, summer 2003

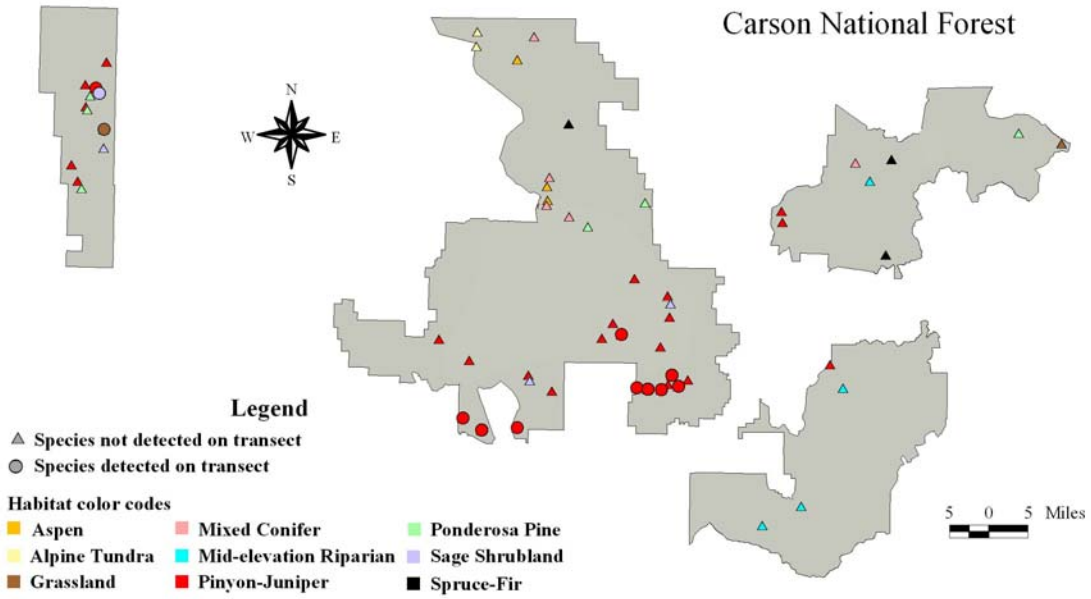
HABITAT	D	LCL	UCL	CV	n
AS	ID	--	--	--	11
AT	ID	--	--	--	3
GR	ID	--	--	--	3
MC	0.2871	0.1922	0.4288	20%	47
MR	0.4231	0.1991	0.8990	33%	29
PJ	ID	--	--	--	11
PP	0.1282	0.0723	0.2273	29%	38
SA	ID	--	--	--	5
SF	0.2442	0.1327	0.4492	31%	35

D=Density in birds/hectare; LCL=lower confidence limit on D;
UCL=upper confidence limit on D; CV=coefficient of variation on D;
n=number of observations; ID=insufficient data



Relative density of American Robin among habitats in the Carson National Forest, summer 2003.

Northern Mockingbird



Northern Mockingbird is a species of arid open areas with sparse tree cover. We were able to provide a density estimate for Northern Mockingbird in Pinyon-Juniper habitat where we detected 38 individuals. Populations of this species have declined recently according to data gathered on Breeding Bird Surveys.

Habitat-specific density estimates for Northern Mockingbird in the Carson National Forest, summer 2003

HABITAT	D	LCL	UCL	CV	n
GR	ID	--	--	--	1
PJ	0.1312	0.0859	0.2004	22%	38
SA	ID	--	--	--	4

D=Density in birds/hectare; LCL=lower confidence limit on D; UCL=upper confidence limit on D; CV=coefficient of variation on D; n=number of observations; ID=insufficient data