



Milton Ranch- Bird Data Summary (2022). Bird species are listed by survey and from most to least detected overall (Ranch Total). Grassland Priority bird species are highlighted in yellow (see below).

- We detected 7 of 17 Montana Grassland priority bird species on Milton Ranch in 2022.
- One MT Audubon Technician (Christian) detected a total of 404 individuals on 3 surveys.
- Of 132 total species detected on ACR ranches across Montana, we detected 44 total species on Milton Ranch.
- We will provide your ranch-specific Bird-Friendliness Index number in late winter/early spring 2023, so we can then see how your ranch ranks against other private lands in the region.

Common Name	MILT1	MILT2	MILT3	Ranch Total
Western Meadowlark	33	29	34	96
Red-winged Blackbird	9	45	3	57
Vesper Sparrow	6	11	20	37
Brewer's Blackbird	15	2	11	28
Long-billed Curlew	12	12	1	25
Brown-headed Cowbird	1	2	11	14
Barn Swallow	6	2	4	12
Common Raven	1	6	5	12
Mourning Dove		6	6	12
Horned Lark	6	3	1	10
Wilson's Snipe		6	4	10
Tree Swallow	8			8
Canada Goose			7	7
American Wigeon	2		3	5
Cedar Waxwing			5	5
Cinnamon Teal		5		5
Killdeer	1	3	1	5
Wilson's Phalarope	1	2	2	5
Northern Harrier	3	1		4
Say's Phoebe	1		3	4
Upland Sandpiper	2	1	1	4
European Starling			3	3
Gadwall		2	1	3
Marbled Godwit		3		3
Ring-necked Pheasant			3	3
American Robin			2	2
Common Grackle			2	2
Grasshopper Sparrow			2	2
Mallard	1	1		2
Rock Wren			2	2
Sharp-tailed Grouse			2	2
Thick-billed Longspur		2		2
American Goldfinch			1	1
Bullock's Oriole			1	1



Common Name	MILT1	MILT2	MILT3	Ranch Total
Burrowing Owl	1			1
California Gull	1			1
Ferruginous Hawk			1	1
Great Blue Heron			1	1
House Sparrow			1	1
House Wren			1	1
Lark Sparrow			1	1
Lazuli Bunting			1	1
Pied-Billed Grebe			1	1
Yellow Warbler			1	1
Yellow-headed Blackbird			1	1
Grand Total	110	144	150	404

See MT Priority Grassland Birds below



Baird's Sparrow

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):

- BCR 11 (Prairie Potholes)
- BCR 17 (Badlands and Prairies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier III (Low Priority)

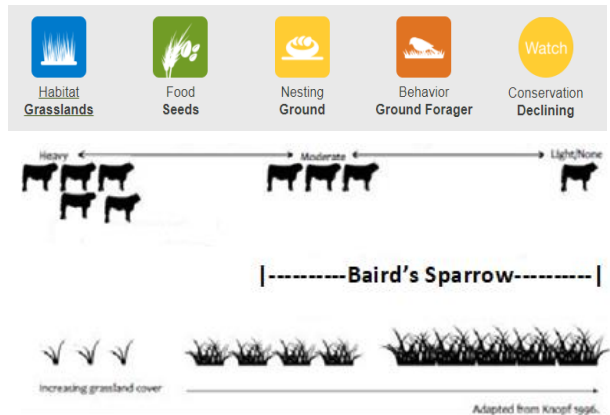
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level I (Clear need for conservation action)

Keys to management:

- Discourage woody species encroachment and habitat fragmentation
- Delay mowing until mid-July or August
- Light grazing and maintaining vegetation diversity
- Secure scattered patches of forbs, grasses of various heights, and litter densities



Brewer's Sparrow

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in MT Bird Conservation Regions (BCR):

- BCR 10 (Northern Rockies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

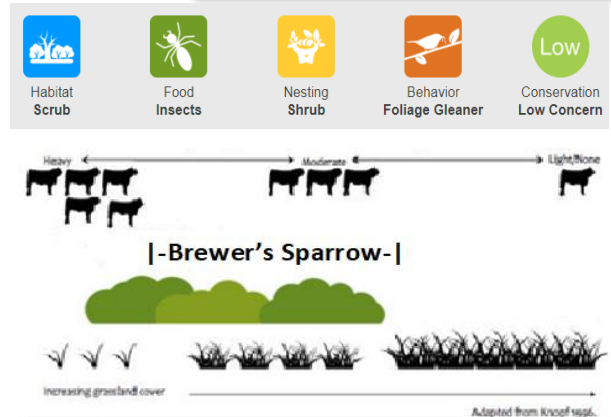
- Tier III (Lower Priority)

Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000): not listed

Keys to habitat management:

- Open shrubland habitat, especially sagebrush cover types.
- Nest concealment by shrub cover is very important
- Sensitive to fragmentation and spraying or removal of shrub-steppe habitat.



Grasshopper Sparrow

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):

- BCR 17 (Badlands and Prairies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier II (Moderate Conservation Need)

Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level II (High monitoring need)

Keys to management:

- Maintaining expansive stands of grassland interspersed with bare ground for nesting, grasses for nesting, forbs for food, and some shrub for cover
- Manage grassland patches for intermediate height with moderately deep litter cover and low shrub density
- Control invasive red ants.
- Limit use of insecticides that reduce insect food sources



Vesper's Sparrow

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR): not listed

Montana Fish Wildlife & Parks (MFWP)-

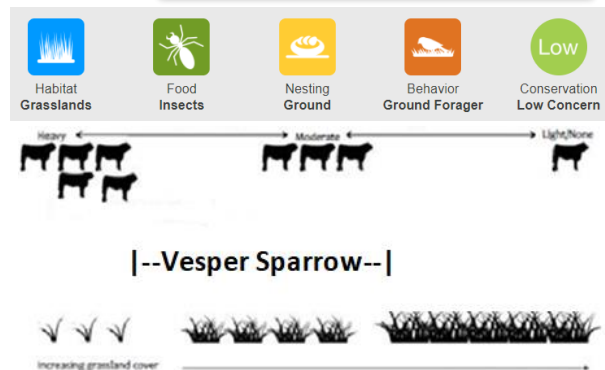
Species of Greatest Conservation Need: not listed

Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000): not listed

Keys to management:

- Nest in open areas with short, sparse grass and scattered shrubs
- Tend to avoid areas with taller grass and wetter areas
- Reduce forest encroachment





Chestnut-collared Longspur

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):

- BCR 11 (Prairie Potholes)
- BCR 17 (Badlands and Prairies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier II (Moderate Priority)

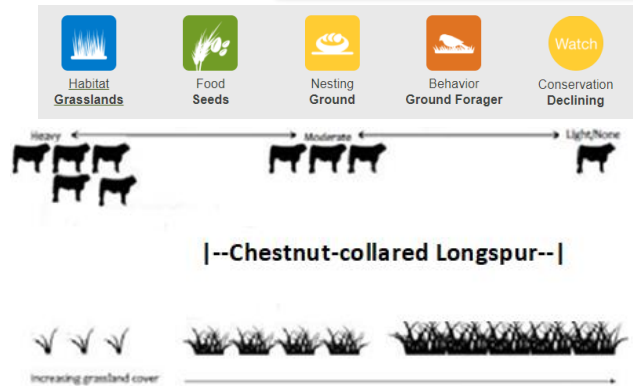
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level II (High monitoring need)

Keys to habitat management:

- Breeds in shortgrass prairie with sparse, open vegetation
- Maintain varying vegetation height and density to support all stages of life
- Prevent woody species encroachment and fragmentation of grasslands.



Thick-billed Longspur

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):

- BCR 10 (Northern Rockies)
- BCR 11 (Prairie Potholes)
- BCR 17 (Badlands and Prairies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier III (Lower Priority)

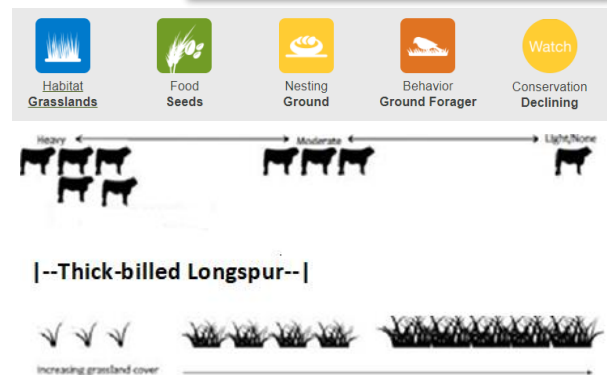
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level II (High Monitoring Need)

Keys to management:

- Open landscape with low vegetation height
- Ground nesting species
- 45 to 80% grass cover and 15 to 25% bare ground for nesting
- Livestock grazing may be beneficial





Sprague's Pipit

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):

- BCR 11 (Prairie Potholes)
- BCR 17 (Badlands and Prairies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier III (Lower Conservation Need)

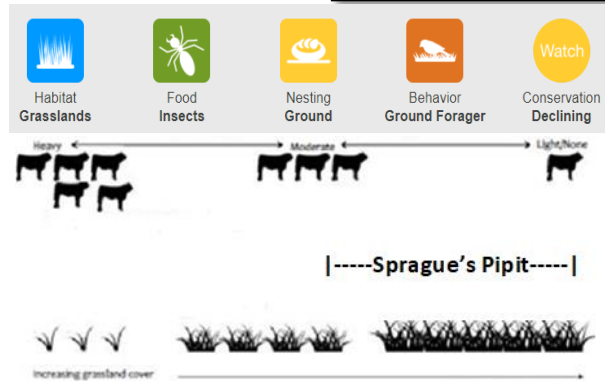
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level I (Clear need for conservation action)

Keys to management:

- Discourage woody species encroachment and fragmentation of grasslands
- Maintain grassland of intermediate height and low visual obstruction



Bobolink

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):

- BCR 10 (Northern Rockies)
- BCR 11 (Prairie Potholes)
- BCR 17 (Badlands and Prairies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier III (Low Priority)

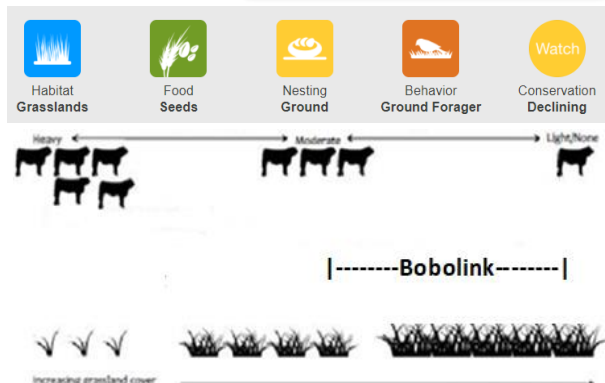
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level III (Local Concern)

Keys to management:

- Density is positively associated with percent grass cover
- Provide hayland and mow late as possible, or rest-rotational haylands
- Prefers lightly grazed areas
- Rotational prescribed burns every 3-5 years can be beneficial to remove woody encroachment and deep litter



Lark Bunting

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR): not listed

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need: not listed

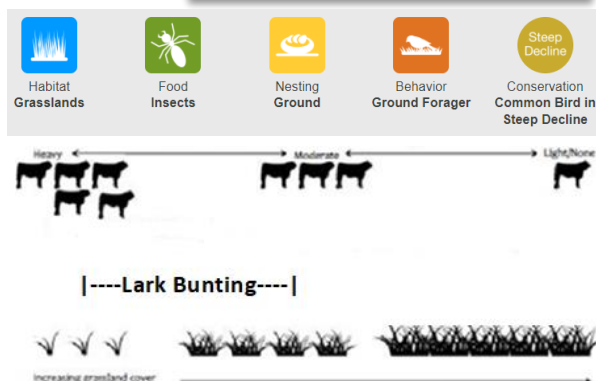
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level II (High Monitoring Need)

Keys to management:

- Maintain native grass species
- Heavy grazing can have negative affect on nesting
- Moderate grazing in taller grass and reduce heavy grazing in arid, short-grass areas
- Maintain varying vegetation height and density to support all stages of life
- Limit use of insecticides that reduce insect food sources



Burrowing Owl

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in MT Bird Conservation Regions (BCR):

- BCR 17 (Badlands and Prairies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier I (Highest Priority)

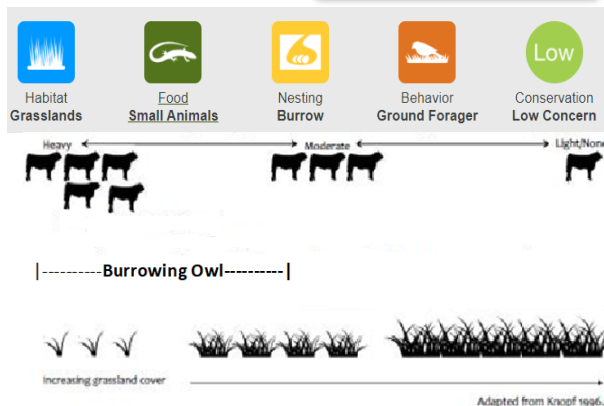
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level I (Clear need for conservation action)

Keys to habitat management:

- Primarily associated with prairie dog colonies
- Livestock grazing can be beneficial
- Fragmented habitat is detrimental and may cause increased competition
- Provide areas of short, sparse vegetation
- Maintain populations of prey species and of burrowing mammals to ensure availability of burrows as nest sites
- Strong nest site (burrow) fidelity



Adapted from Knopf 1996.



Ferruginous Hawk

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):

- BCR 17 (Badlands and Prairies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier III (Lower Conservation Need)

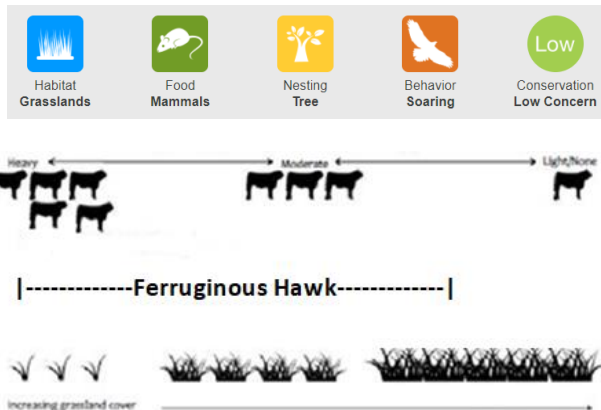
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level II (High monitoring need)

Keys to habitat management:

- Open landscape and level or rolling terrain, with rocky outcrops, hills, buttes, or isolated trees for nest site placement
- Vegetation height of 6 to 24 inches
- Maintain small to medium-sized mammals. Feeds on most readily available small prey, such as young jackrabbits, cottontail rabbits, ground squirrels, pocket gophers, kangaroo rats, mice, birds, snakes, large insects
- Moderate livestock grazing may be beneficial for prey abundance



Golden Eagle

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR): not listed

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

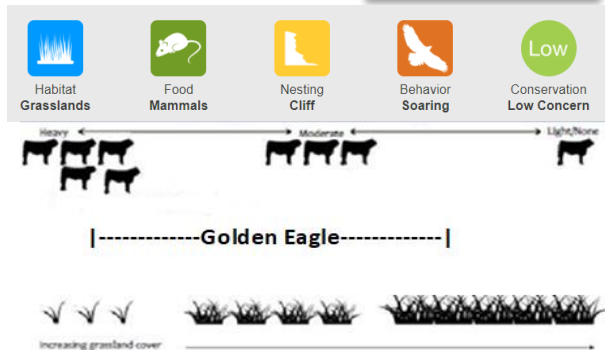
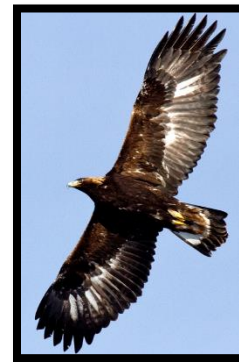
- Tier III (Low Priority)

Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000): not listed

Keys to management:

- Maintain prey habitat for jack rabbits, prairie dogs, and ground squirrels including native grasslands and shrub-steppe communities
- Minimize human disturbance around nesting sites
- Protect shrub-steppe habitat in 3km radius around nests
- Power poles and wind turbines can be designed and built to reduce likelihood of electrocution and collision.





Loggerhead Shrike

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):
not listed

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier III (Lower Conservation Need)

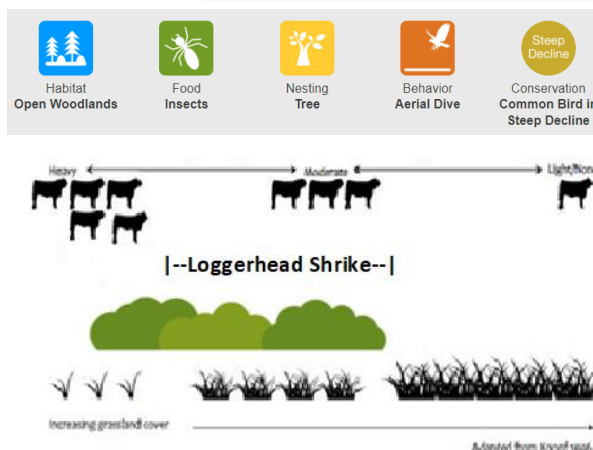
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level II (High monitoring need)

Keys to management:

- Relatively open habitat with scattered trees and shrubs for nesting and perch sites
- Patchy, shorter vegetation and bare ground for foraging
- Maintain prey base by conservative burning and limited pesticide use
- Uses barbed wire fences for perching and prey impalement



Greater Sage-grouse

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR): not listed

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier II (Moderate Conservation Need)

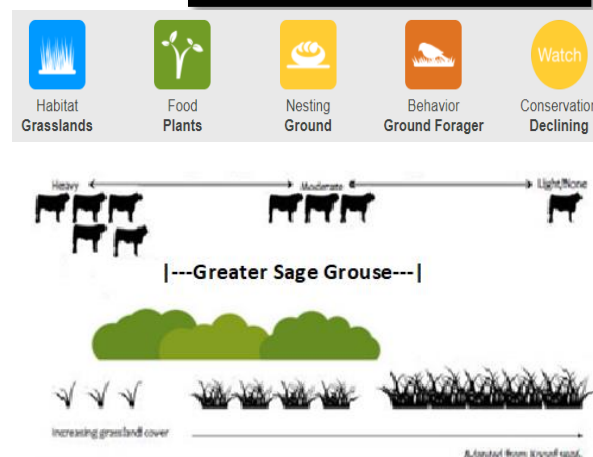
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level I (Clear need for conservation action)

Keys to management:

- Maintaining expansive stands of sagebrush with abundant forbs in the understory
- Presence of undisturbed and relatively open sites for leks, and healthy perennial grass and forb stands intermixed with sagebrush for brood rearing
- Fire and overgrazing can degrade suitable sagebrush habitats
- Winter habitats require shrubs that are exposed or above snow level





Long-billed Curlew

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):

- BCR 11 (Prairie Potholes)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier III (Low Priority)

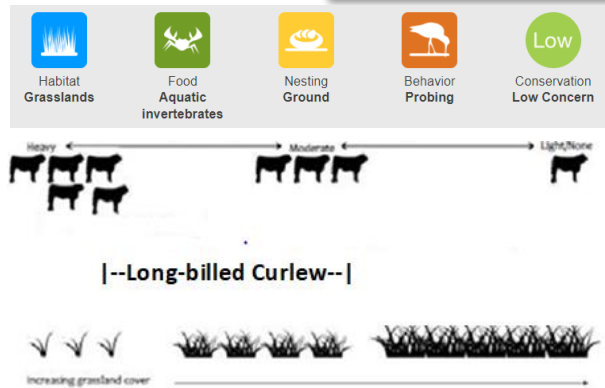
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level II (High Monitoring Need)

Keys to management:

- Requires short grass during breeding season
- Sensitive to disturbance like off-road vehicle use
- Early season grazing with long rest periods during breeding season can have a positive effect



Mountain Plover

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR):

- BCR 10 (Northern Rockies)
- BCR 11 (Prairie Potholes)
- BCR 17 (Badlands and Prairies)

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need:

- Tier II (High Monitoring Need)

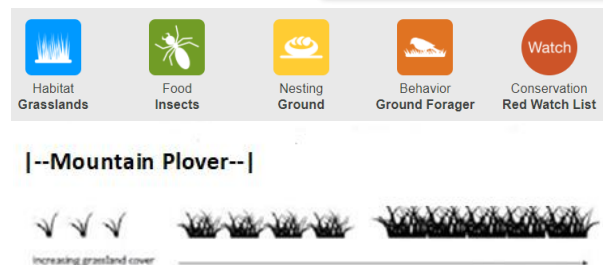
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level I (Clear need for conservation action)

Keys to management:

- Prefers extremely short vegetation, a high percentage of bare soil, in an extensive area (0.5 to 1km diameter) of level terrain
- Associated with prairie dog towns on level ground
- Combine light to moderate grazing with prescribed burning to reduce woody plants
- Intensive grazing on level shortgrass prairie
- Reduce invasive and non-native vegetation species





Upland Sandpiper

United States Fish and Wildlife Service (USFWS)-

Birds of Conservation Concern (2021) in Bird Conservation Regions (BCR): not listed

Montana Fish Wildlife & Parks (MFWP)-

Species of Greatest Conservation Need: not listed

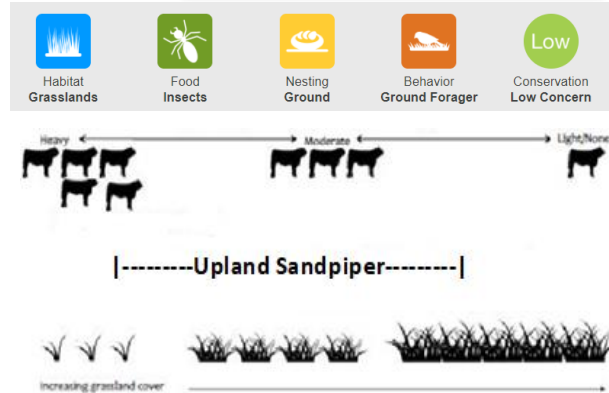
Partners in Flight (PIF)-

Landbird Conservation Plan for Montana (2000):

- Level IV (non priority)

Keys to management:

- Provide grassland patches of varying height and sparse woody vegetation.
- Maintain managed (e.g., grazed, burned, or mowed) patches for feeding, loafing, and brood rearing.
- Leave some patches undisturbed to serve as nesting cover.



Bird Species pictures are courtesy of the National Audubon Society (Grasshopper Sparrow, Chestnut-collared Longspur, Thick-billed Longspur, Burrowing Owl, Ferruginous Hawk, Upland Sandpiper) and Bob Martinka (Baird's Sparrow, Brewer' Sparrow, Vesper Sparrow, Sprague's Pipit, Bobolink, Lark Bunting, Greater-sage Grouse, Golden Eagle, Loggerhead Shrike, Long-billed Curlew, Mountain Plover). Bird species biology icons are courtesy of Cornell Lab of Ornithology All About Birds. Grazing Icons are adapted from Montana Natural Heritage Program via Knopf 1996.

