Long-billed Curlew *Numenius americanus*



Photo by Martin Meyers

Habitat Use Profile

	Wet Meadows				
Main Habitats	Agricultural				
Used in Nevada	Lowland Riparian, primarily Great				
	Basin [s, p1, p4, p9]				
Key Habitat Use Parameters	Preferred nesting sites in Nevada are wet meadows / agricultural fields (Hartman and Oring 2008) Will also nest in more sparsely vegetated areas, including agricultural fields with short stubble [p1] More densely vegetated areas with greater cover used for brood-rearing [p1] Forages in a variety of uplands, wet soils, mudflats, shorelines [p1] Will sometimes forage in shallowly flooded fields or shallow water, but avoids > 16				
	cm water depth [p1] Territory size: 6-14 ha; needs 300-				
Minimum Patch	500 m buffer around				
Size	territory; therefore, patch				
	size ~50-100 ha [p1]				

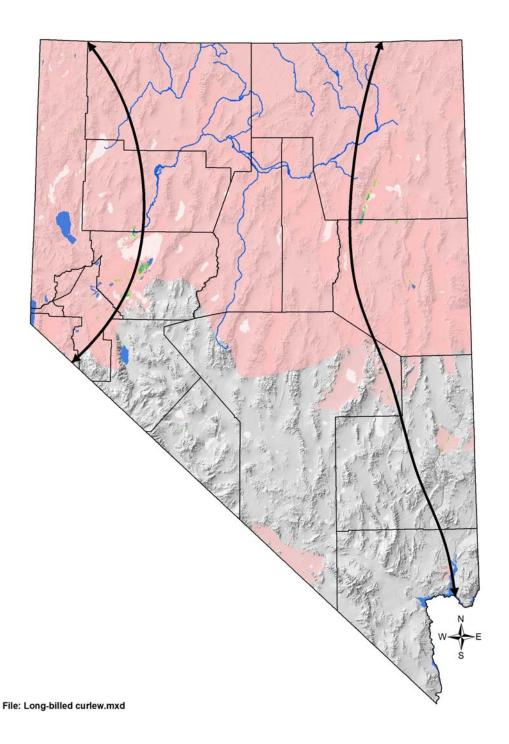
Conservation Profile

Priority Status	Conservation Target				
Reasons for Priority	Small population size				
Status	Possible threats				
Other Rankings	Continental PIF: None				
	Audubon Watchlist: None				
	Natural Heritage: S2S3B				
	USFWS: Bird of Conservation Concern				
	(Great Basin and Mojave				
	Desert); Migratory Bird				
	BLM: Sensitive Species				
	NDOW: Conservation Priority				
	IM West Shorebird: Critically Important				
Trends	Historical: Significant declines [p1]				
	Recent: Stable or increasing				
	[LBCUSACP]				
Population Size Estimates	Nevada: 1,150 [LBCUSACP]				
	Global: 65,500 [LBCUSACP]				
	Percent of Global: 2%				
Population	Maintain population of 1,150 breeding				
Objective	birds				
Monitoring	Source: Nevada Bird Count, refuge				
Monitoring Coverage	counts				
	Coverage and Adequacy: Good				
Key Conservation	Ruby Valley, Humboldt River system				
Areas					

Natural History Profile

Seasonal Presence	Spring – summer (breeding)		
in Nevada	cpg		
Known Breeding	April – July [s4]		
Dates in Nevada			
	Nest is a scrape on ground, located		
Nesting Habits	where vegetation height		
	generally < 10 cm [p1]		
	Pecks and probes for a variety of		
Food Requirements	medium – large invertebrates		
	and small vertebrates		

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Temporary Map Key

Pink: Breeding range

Hot pink / magenta: For some birds, breeding data was limited, and was supplemented by extrapolation to include likely breeding range. In these cases, hot pink represents known breeding range, and lighter pink the extrapolated breeding range.

Blue: Winter range

Yellow: Important migration stopover areas

Purple: Year-round range

Green: In some maps, wetlands mapped by SWReGAP are shown in green for interpretational purposes

Dot symbols: In cases where breeding records were isolated or very restricted in extent, they are represented by a pink dot symbol rather than a shaded area.

Arrows: Major migration routes. These are shown only for birds for which there are migration-associated conservation issues.

OVERVIEW

Although the Great Basin contains only a modest proportion of the global population of breeding Long-billed Curlews, research conducted here has made a disproportionately large contribution to our knowledge of the species [p1]. For a shorebird, this species uses surprisingly dry areas and can be found in a wide variety of habitats that could be characterized as "open but with groundcover". Traditionally a wet meadow and grassland bird, Long-billed Curlews have adapted to the desert, and now make frequent use of Nevada's agricultural areas for both foraging and nesting. The species breeds across northern Nevada, but there is a pronounced concentration in the northeastern quadrant of the state, which is regarded as a breeding stronghold [p9]. In this area, a significant amount of nesting occurs on private land, leaving much of the species management in the hands of private landowners.

ABUNDANCE AND OCCUPANCY BY HABITAT TYPE

Habitat-specific density based on Nevada Bird Count data

Long-billed Cu	ırlew					
	Primary Habitat Type Present at Transect	No.	Nev	Nevada Bird Count Sightings per 40 ha		
		Transects with Sightings		average	95% confidence interval**	% transects occupied
Great Basin Lowland Riparian Montane Riparian Salt Desert Wetland	Lowland Riparian	5		7.4	-2.2 - 17.0	0.08 (5/66)
	Montane Riparian	n/a		n/a	n/a	0.01 (1/88)
	Salt Desert	1		6.4	n/a	0.09 (2/23)
	Wetland	9		3.3	1.4 - 5.3	0.37 (11/30)

 As many as 450 in North Ruby Valley, with densities of ~ 7 males / 100 ha (Hartman and Oring 2008)

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NEVADA-SPECIFIC STUDIES AND ANALYSES

• TBD (Hartman and Oring refs)

MAIN THREATS AND CHALLENGES

- Loss of Wet Meadow habitat
- Heavy livestock grazing, particularly during nesting period [p1, p3, EO]
- Agricultural activities during nesting period
- Drying of wet meadows due to groundwater pumping or surface water diversions

CONSERVATION STRATEGIES

Habitat Strategies

- General Wet Meadow and Agricultural conservation strategies
- Manage livestock grazing in breeding areas in wet meadows during the Longbilled Curlew breeding season; rotational grazing strategies may be effective to produce a mosaic of different vegetation covers to accommodate habitat preferences for nesting and brood rearing

Public Outreach

- Encourage deferment of haying or other mechanized agricultural activity until after the nesting season
- Discourage loss of water in wet meadows to groundwater pumping or surface water diversion
- Engage in cooperative conservation efforts with private landowners

Research, Planning, and Monitoring

• Where water diversions may impact curlew breeding habitat, monitor these impacts

PRIORITY SPECIES WITH SIMILAR CONSERVATION STRATEGIES

• TBD

FURTHER READING

- Fellow and Jones 2009
- Hartman and Oring 2009

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Temporary codes for standard references

- [p1] Birds of N. America account for this species
- [p2] NV Bird Conservation Plan ver. 1 (Neel 1999)
- [p3] NV Wildlife Action Plan
- [p4] Nevada Breeding Bird Atlas
- [p5] PIF N. American Landbird Conservation Plan (Rich et al 2004) (NOTE:
- [p6] Intermountain West Regional Shorebird Plan (Oring et al 2003)
- [p7] Pacific Flyway reports
- [p8] Shrubsteppe Landscapes in Jeopardy (Dobkin and Sauder 2004)
- [p9] Birds in a Sagebrush Sea (Paige and Ritter 1999)
- [s1] NBC-based population size estimates
- [s2, s3] NBC-based habitat relationship analysis
- [s4] Breeding Bird Atlas breeding phenology data
- [i1] BBS trends analysis (Sauer et al 2005)
- [i2] NV Upland Game Management Plan (Espinosa et al in prep.)
- [i3] Western Quail Management Plan (Zornes et al 2008)
- [i4] NDOW Shorebird and Waterbird monitoring data (Neel)
- [i5] Brad Andres IMJV Shorebird / Waterbird data set
- [i6] GBBO Technical Report 08-01 (2008)
- [EO] Expert opinion from NVPIF group members
- [IWWCP] Intermountain West Waterbird Conservation Plan
- [NAWCP] North American Waterbird Conservation Plan
- [LBCUSACP] Long-billed Curlew Status Assessment and Conservation Plan
- [USSCP] U.S. Shorebird Conservation Plan
- [WHSRN] Western Hemispheric Shorebird Regional Network