

Appendix 5B: Species Accounts

Each species account includes data collected from the Waterbird Survey, and in many cases, population estimates on a broader scale from outside sources (br = breeding adults; Morrison et al. 2001; Wilkens et al. 2000; Kushlan et al. 2002, Appendix 4; Jehl 2001; Rose and Scott 1997). For time-series plots, we calculated means over all available years (1997-2017) for each survey period by study area, and then summed these means across study areas to gain a typical survey period sum. Mean counts in the tables were averages, across all years and then periods, during the season(s) of highest abundance. Peak counts were the highest average counts during one survey period regardless of season. Seasons and periods of highest abundance are indicated in table headers. The high count in the tables, with the year given, is the highest recorded count during one period. The abundance status was taken from a Utah birds checklist (Utah Bird Records Committee 2020) and was included as a description of species occurrence (C = common, seen frequently in habitat; U = inconsistently found in small numbers in appropriate habitat and season). The maps are graphical representations of the species-specific mean counts for each study area from Appendix 4B. Areas not shaded represent a count of zero.

Caution Regarding Comparisons of New and Old Appendices

The new appendices (data spanning 1997 – 2017) should be considered as complementary to the ones created for the 2002 report (data spanning 1997 – 2001). The new appendices are particularly valuable in that they were generated from a dataset that spanned 21 years of observations, compared to 5 years for the old appendices. The old appendices are particularly valuable in that they were generated from a dataset that included many more survey areas and survey periods per year, compared to the new appendices. When viewed as complementary, a reader can use the two sets of appendices to gain a clearer picture about the relative abundances and distributions of waterbird species across Great Salt Lake.

Given the superficial resemblance between the two sets of appendices, it may be tempting to compare metrics to infer something about changes in abundance or distribution across the 21 years represented by the new dataset. Literal comparisons between the two sets of appendices are generally not recommended, however, due to changes in survey areas and survey periods over the years. In Appendix 2B, we describe a case study that illustrates the pitfalls of such comparisons.

A statistically rigorous analysis of trends based on the 21-year data set has been completed and will be made publicly available pending scientific peer-review process.

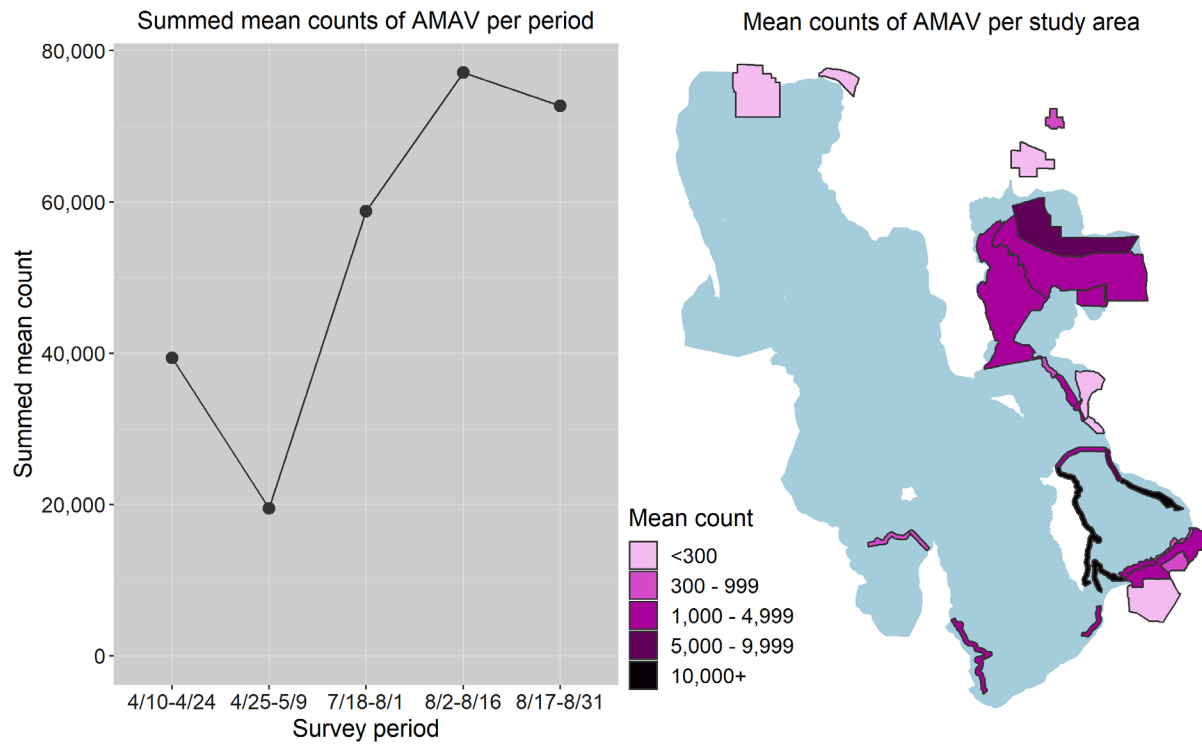
References

- Jehl, J.R., Jr. 2001. The abundance of the eared (black-necked) grebe as a recent phenomenon. *Waterbirds* 24:245-249.
- Kushlan, J.A., M.J. Steinkamp, K.C. Parsons, J. Capp, M.A. Cruz, M. Coulter, I. Davidson, L. Dickson, N. Edelson, R. Elliot, R.M. Erwin, S. Hatch, S. Kress, R. Milko, S. Miller, K. Mills, R. Paul, R. Phillips, J.E. Saliva, B. Sydeman, J. Trapp, J. Wheeler, and K. Wohl. 2002. Waterbird conservation for the Americas: the North American waterbird conservation plan, version 1. Waterbird Conservation for the Americas, Washington, DC, USA. 78 pages.

- Morrison, R.I.G., R.E. Gill, Jr., B.A. Harrington, S. Skagen, G.W. Page, C.L. Gratto-Trevor and S.M. Haig. 2001. Estimates of shorebird populations in North America. Canadian Wildlife Service occasional paper number 104. Canadian Wildlife Service, Ottawa, Ontario, Canada. 64 pages.
- Rose, P.M., and D.A. Scott. 1997. Waterfowl population estimates, second edition. Wetlands International publication number 44. Wetlands International, Wageningen, The Netherlands. 106 pages.
- Utah Bird Records Committee. 2020. Checklist of the birds of Utah. <http://www.utahbirds.org/checklistUtah.htm>. Accessed October 2020.
- Wilkins, K.A., M.C. Otto, and G.W. Smith. 2000. Trends in duck breeding populations, 1955-2000. US Fish and Wildlife Service publication 413.

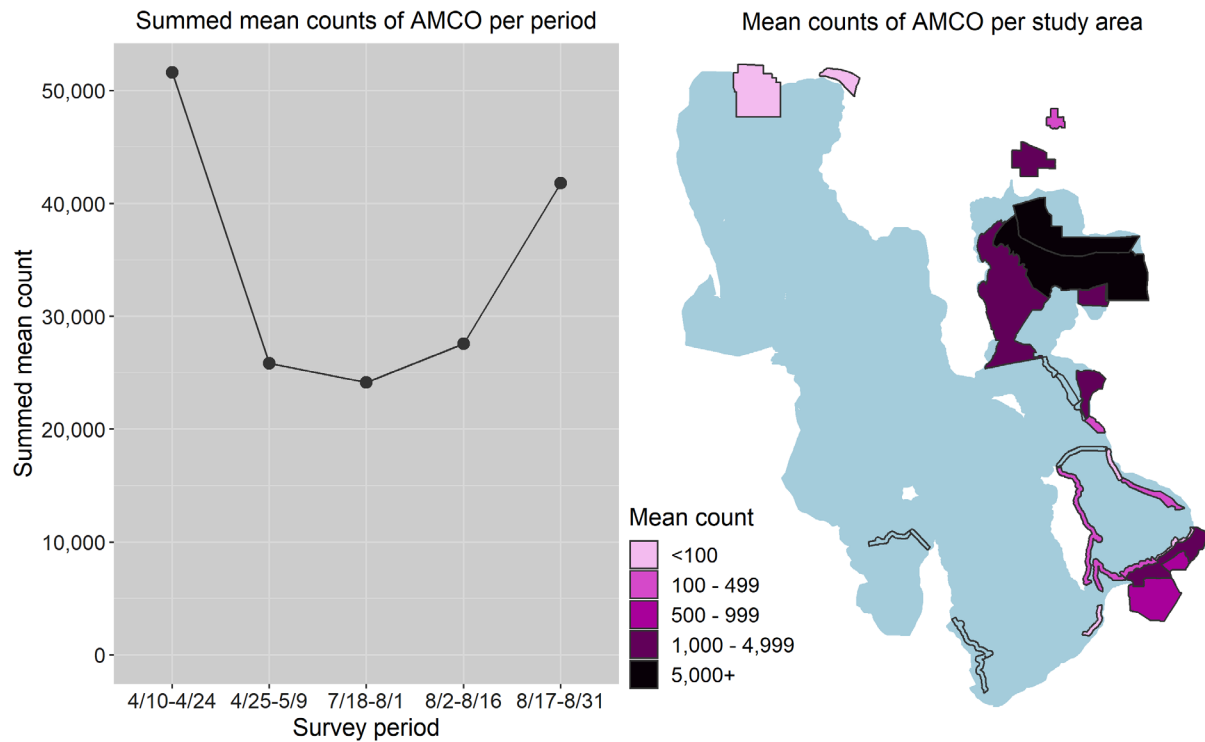
American Avocet

Code	Population estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 4	High Count 2009	Abundance Status
AMAV	450,000	450,000	69,528	77,102	118,125	C



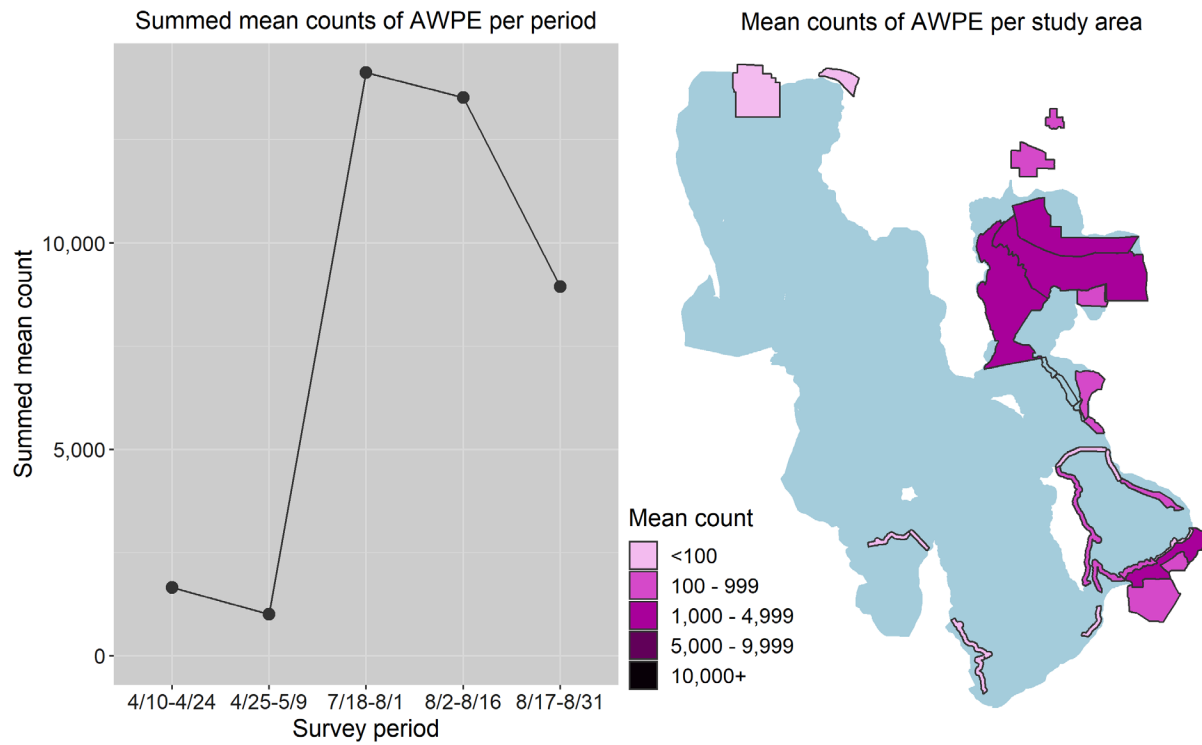
American Coot

Code	Population estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 1	High Count 2014	Abundance Status
AMCO	NA	1,625,949	31,185	51,615	72,275	C



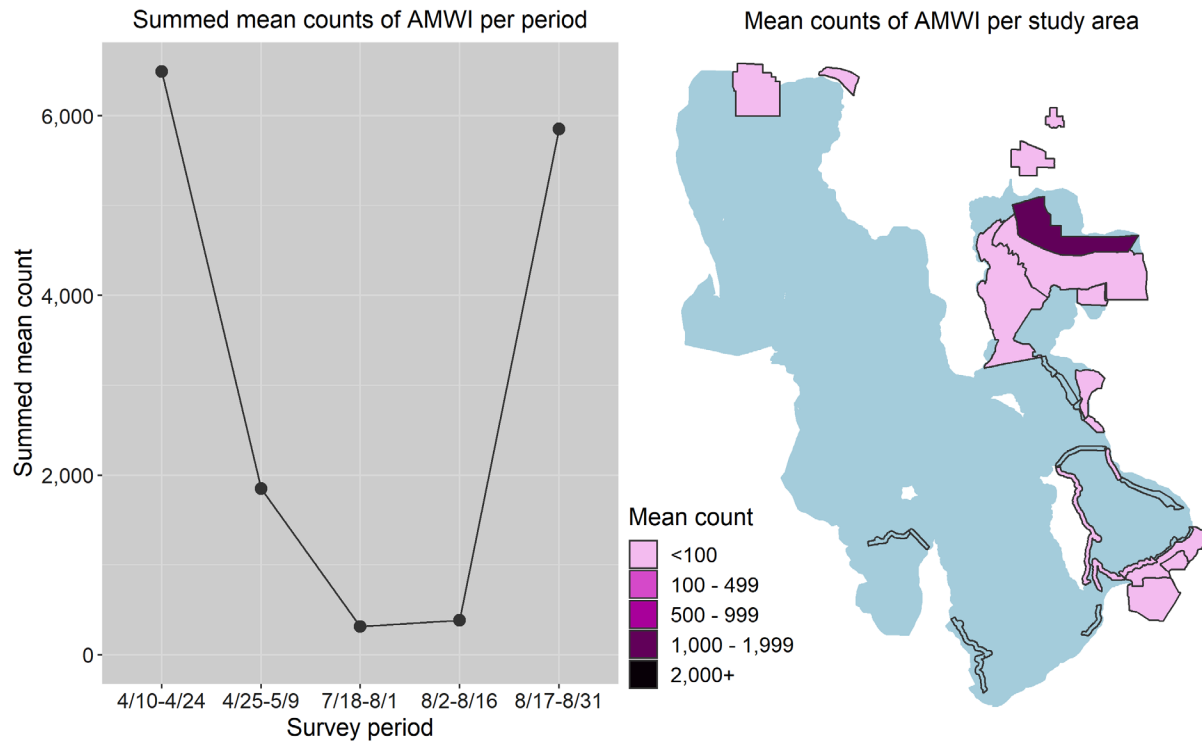
American White Pelican

Code	Population estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 3	High Count 2009	Abundance Status
AWPE	NA	>120,000 br	12,197	14,130	33,399	C



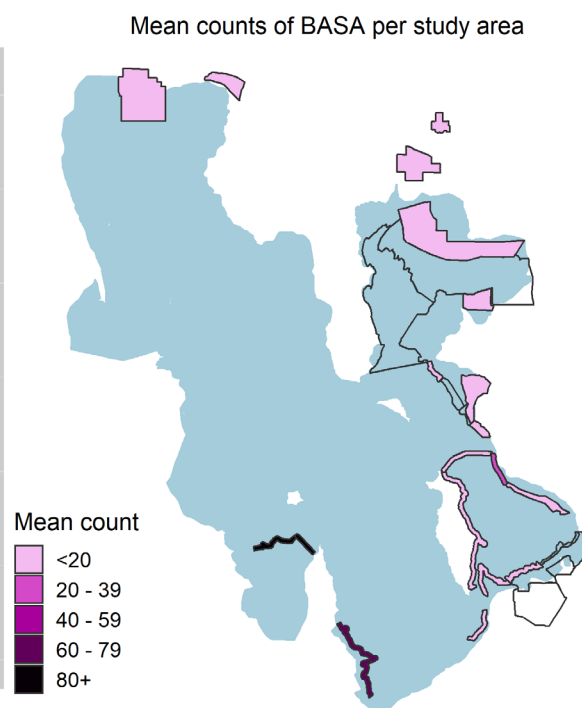
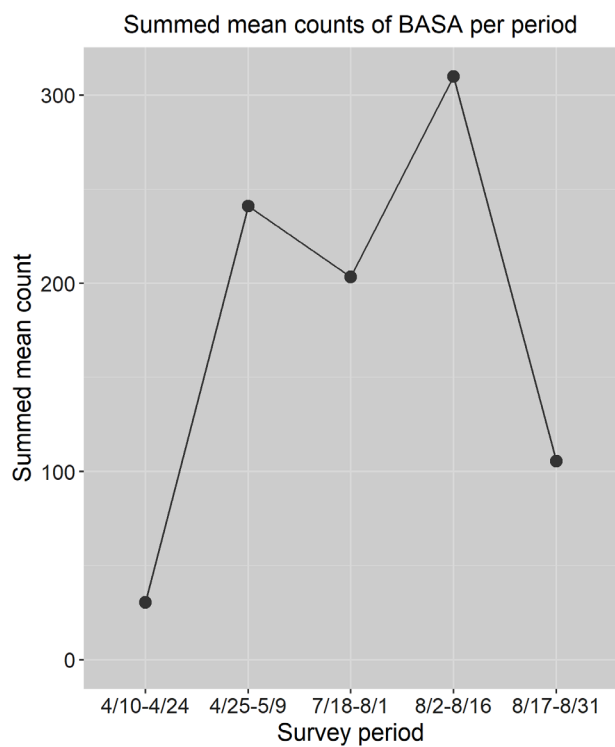
American Wigeon

Code	Population estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 1	High Count 2007	Abundance Status
AMWI	NA	2,647,200	2,184	6,492	17,375	C



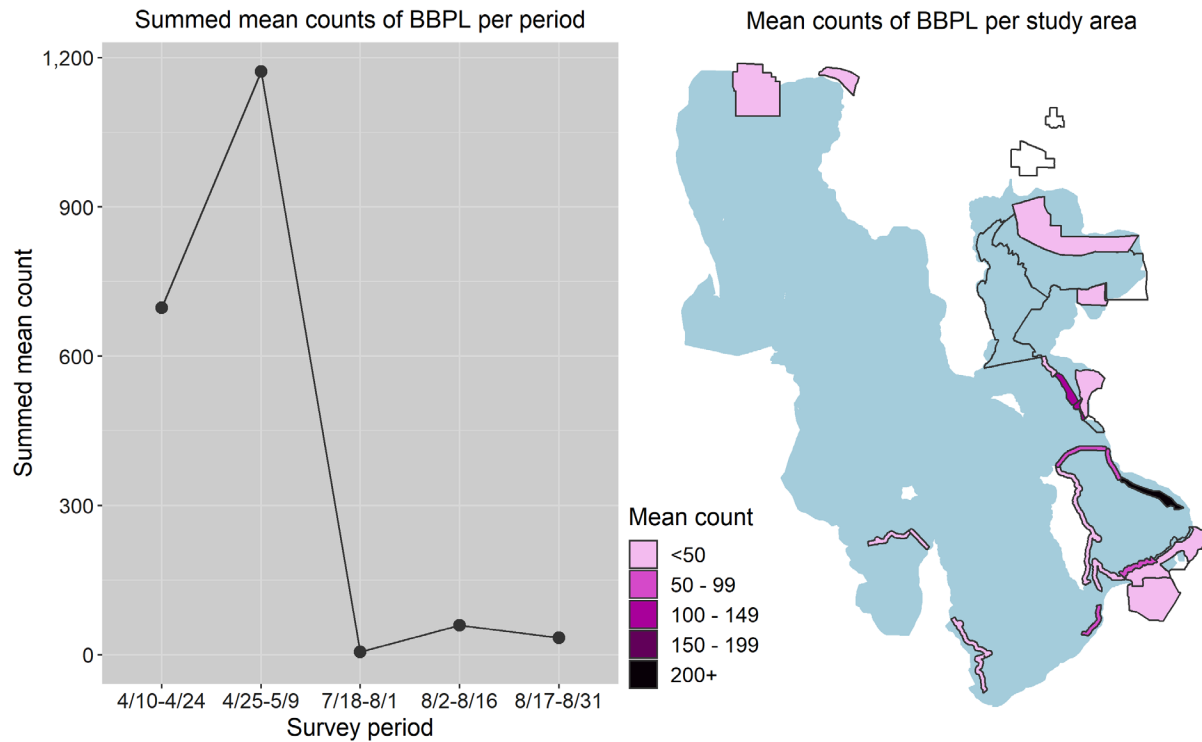
Baird's Sandpiper

Code	Population estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 4	High Count 2017	Abundance Status
BASA	300,000	300,000	206	310	1,635	C



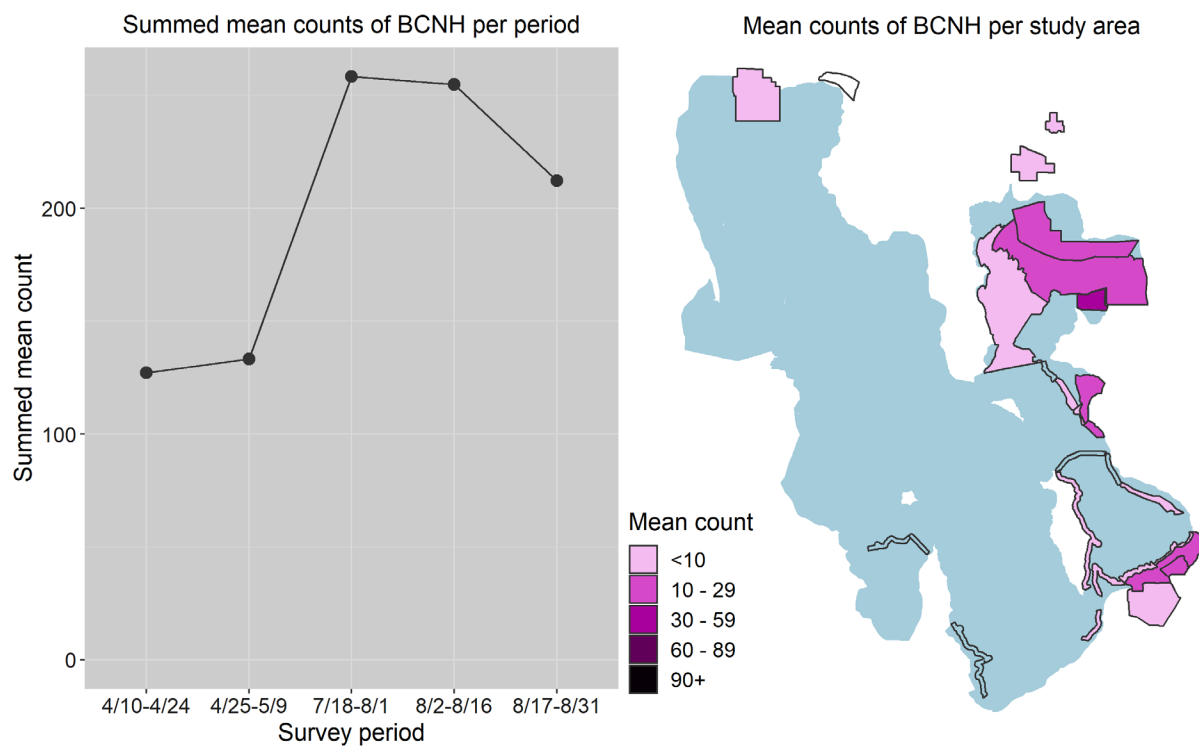
Black-bellied Plover

Code	Population estimates		Great Salt Lake			
	Global	North America	Mean Spring	Peak Period 2	High Count 2004	Abundance Status
BBPL	498,000	200,000	935	1,172	3,590	U



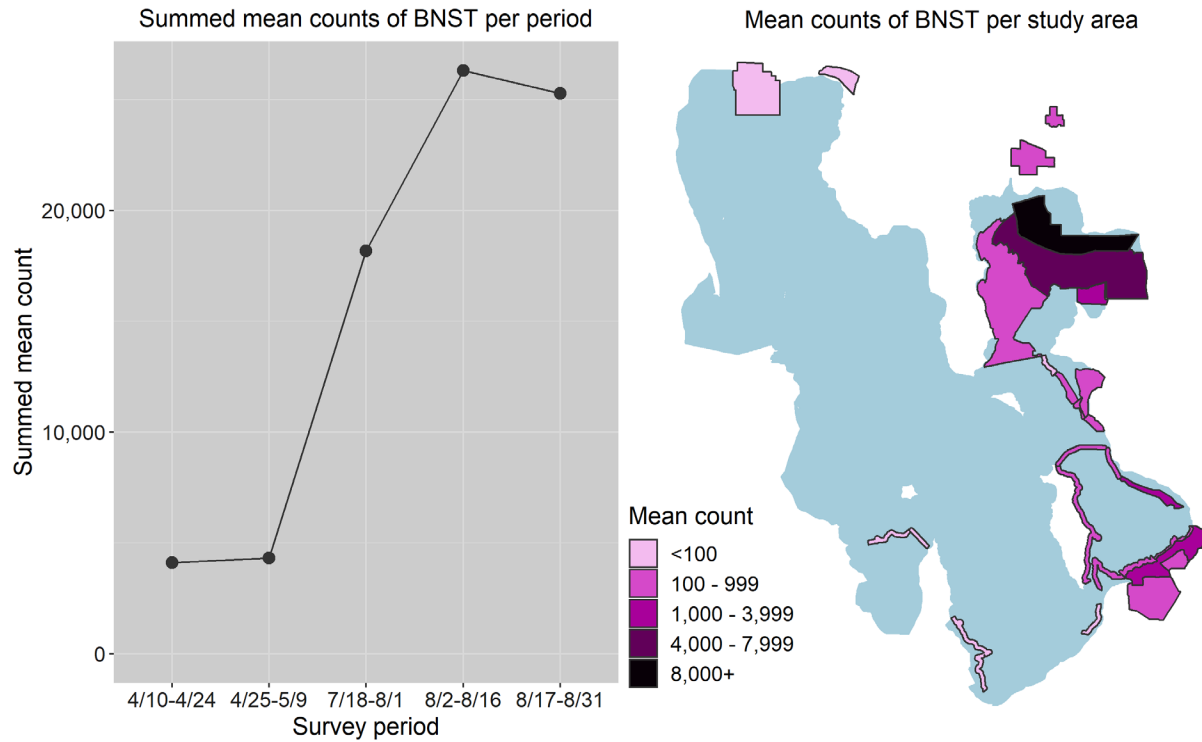
Black-crowned Night-Heron

Population estimates			Great Salt Lake			
Code	Global	North America	Mean Spring and Fall	Peak Period 3	High Count 2006	Abundance Status
BCNH	NA	>50,000 br	197	258	408	C



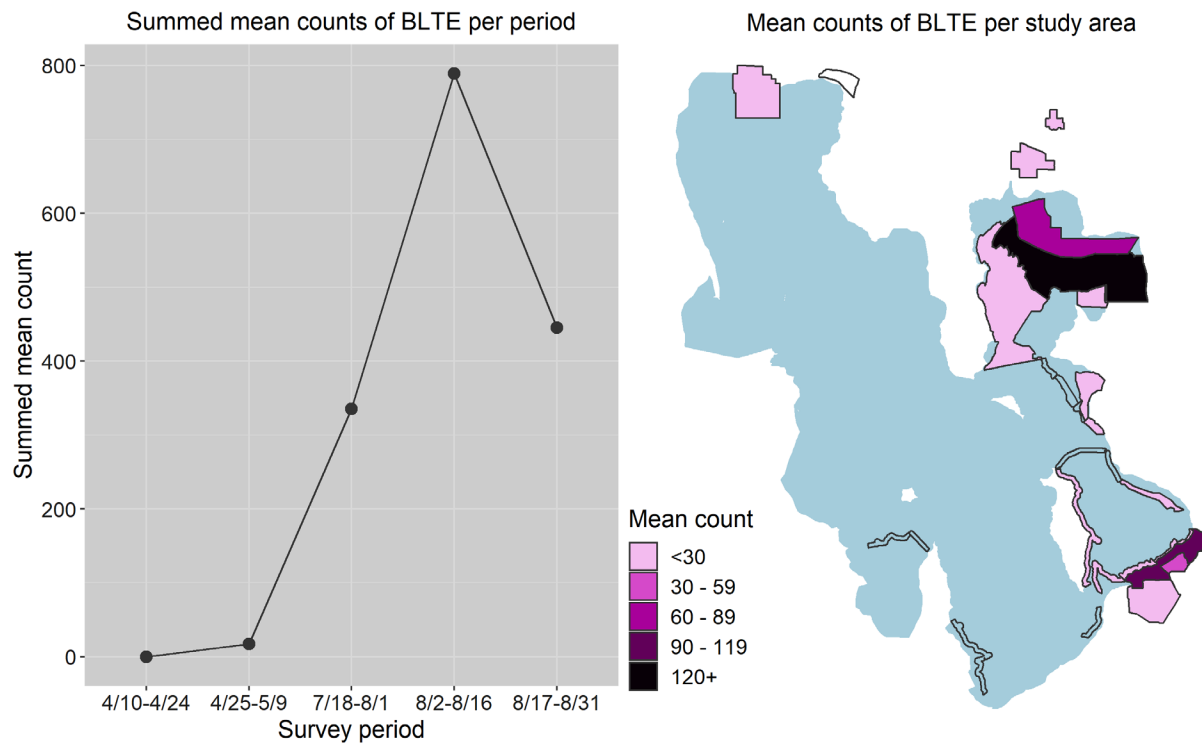
Black-necked Stilt

Code	Population estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 4	High Count 2000	Abundance Status
BNST	>850,000	150,000	23,254	26,308	32,497	C



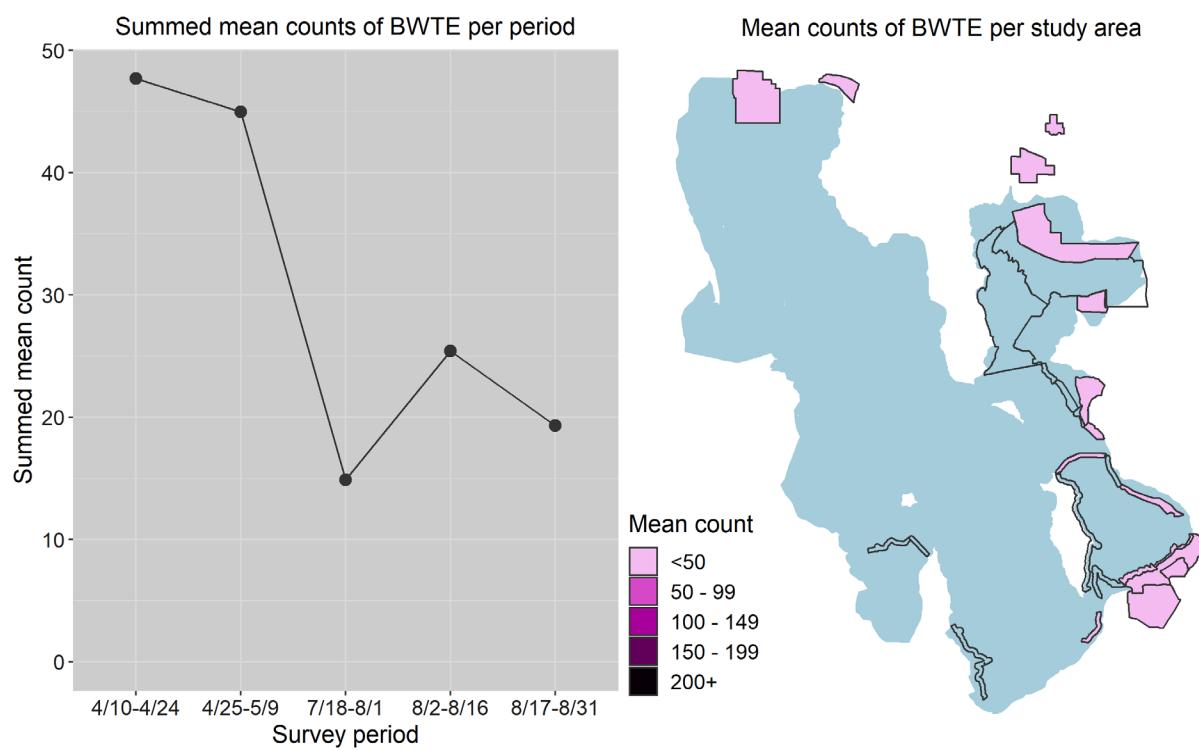
Black Tern

Code	Population estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 4	High Count 2006	Abundance Status
BLTE	NA	<500,000 br	523	789	2,112	U



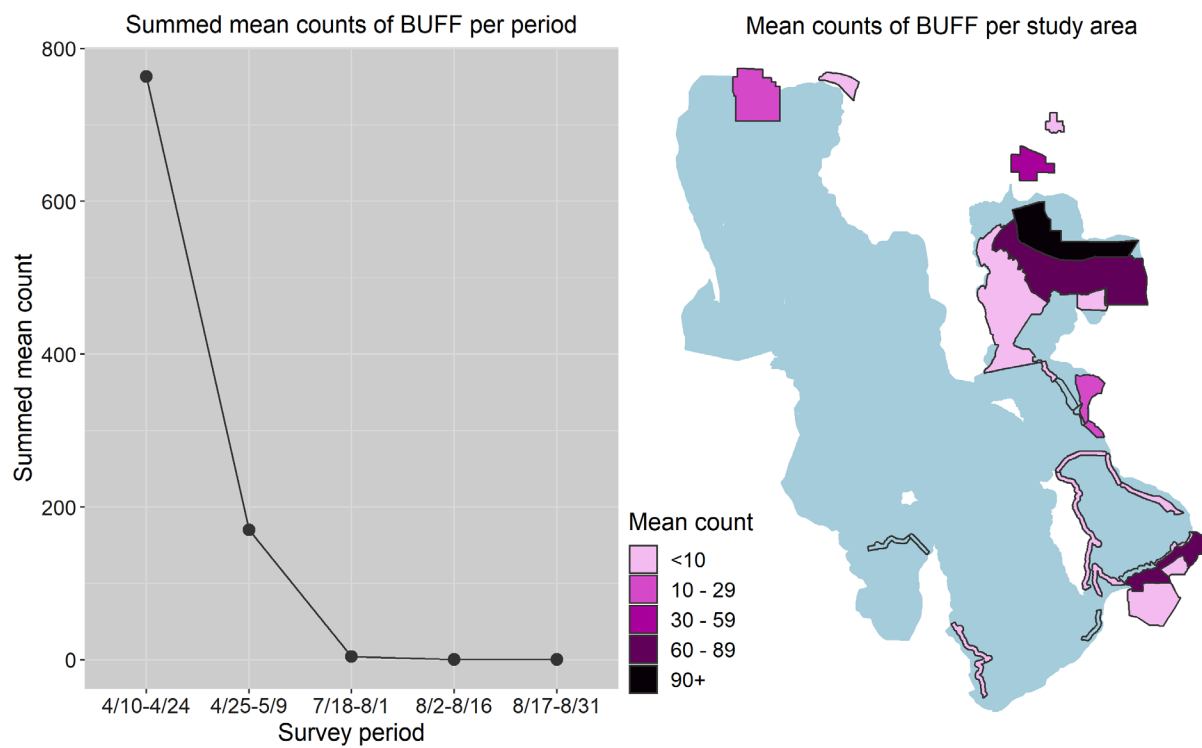
Blue-winged Teal

Code	Population estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 1	High Count 2012	Abundance Status
BWTE	4,881,900	4,399,700	20	48	203	U



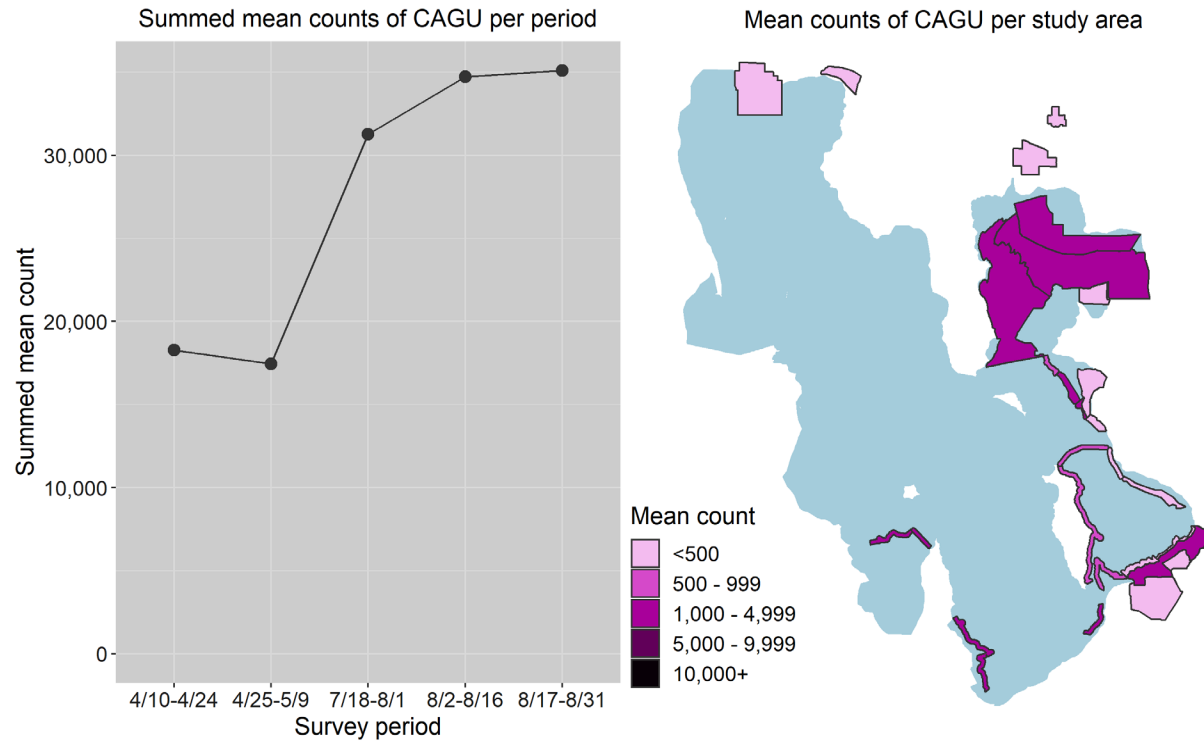
Bufflehead

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring	Peak Period 1	High Count 2017	Abundance Status
BUFF	8,864,000	679,955	467	763	1,048	C



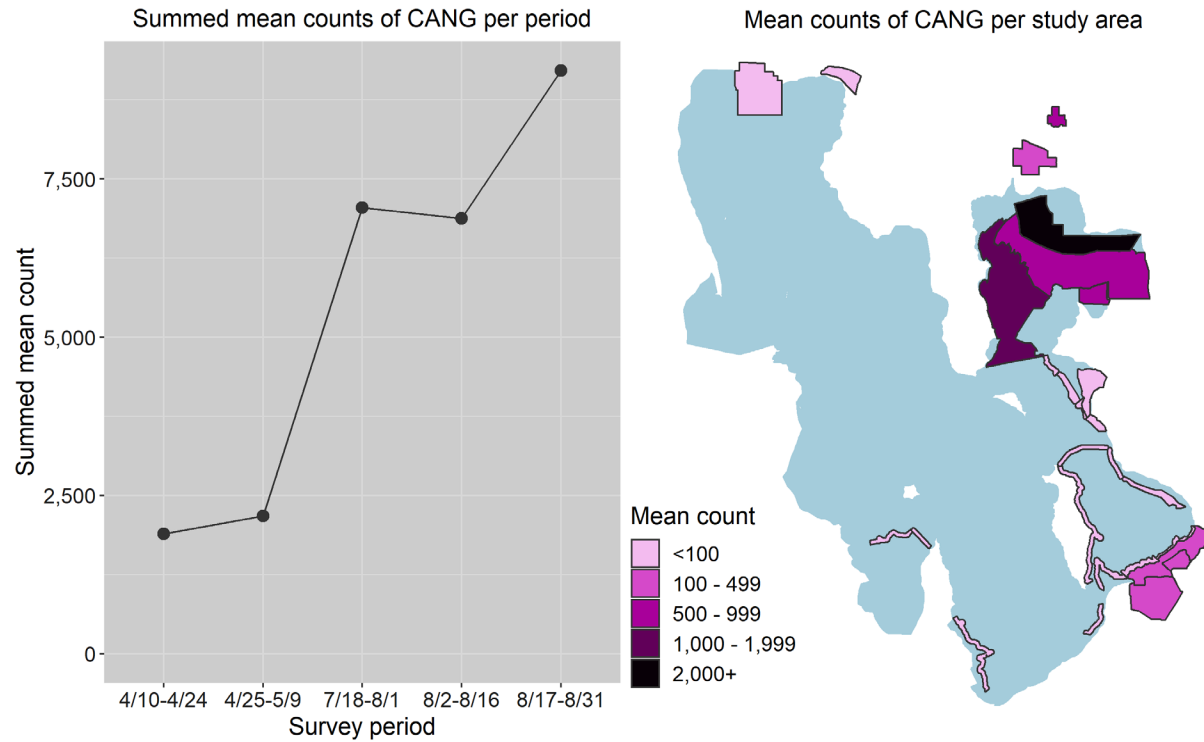
California Gull

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 5	High Count 2000	Abundance Status
CAGU	NA	>414,000 br	27,370	35,112	47,352	C



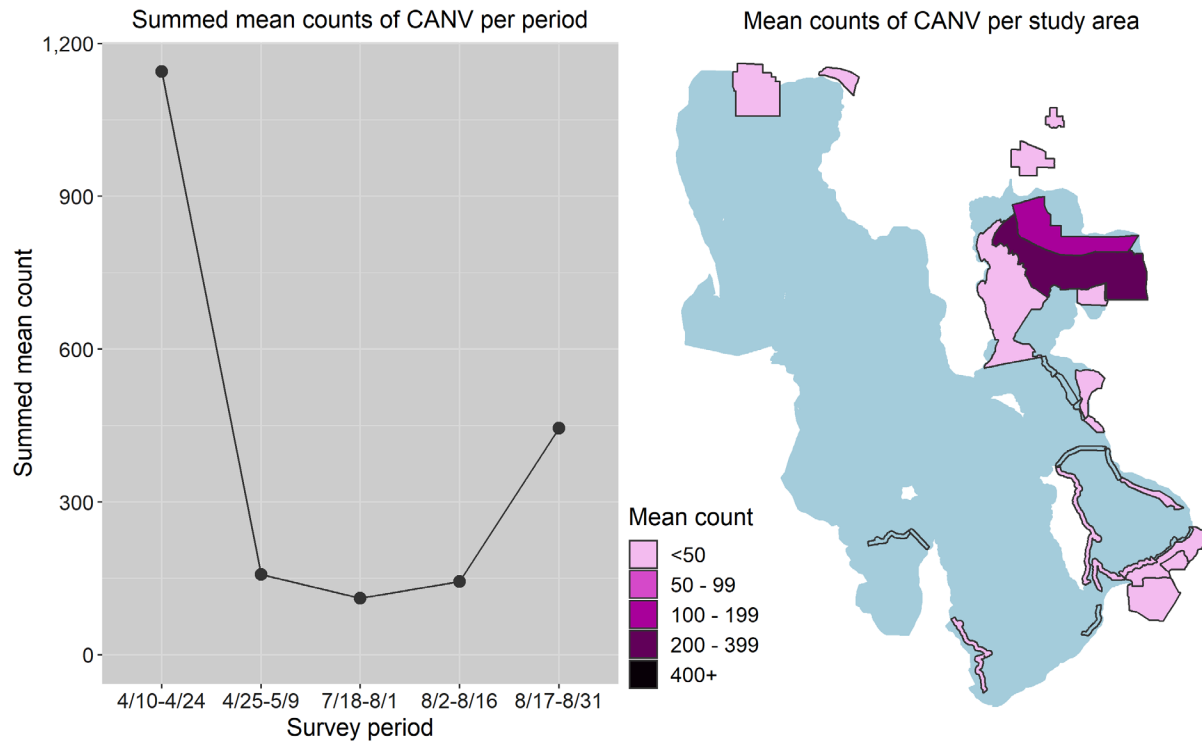
Canada Goose

Population Estimates			Great Salt Lake			
Code	Global	North America	Mean Fall	Peak Period 5	High Count 2011	Abundance Status
CANG	4,479,300	4,479,300	7,713	9,213	13,355	C



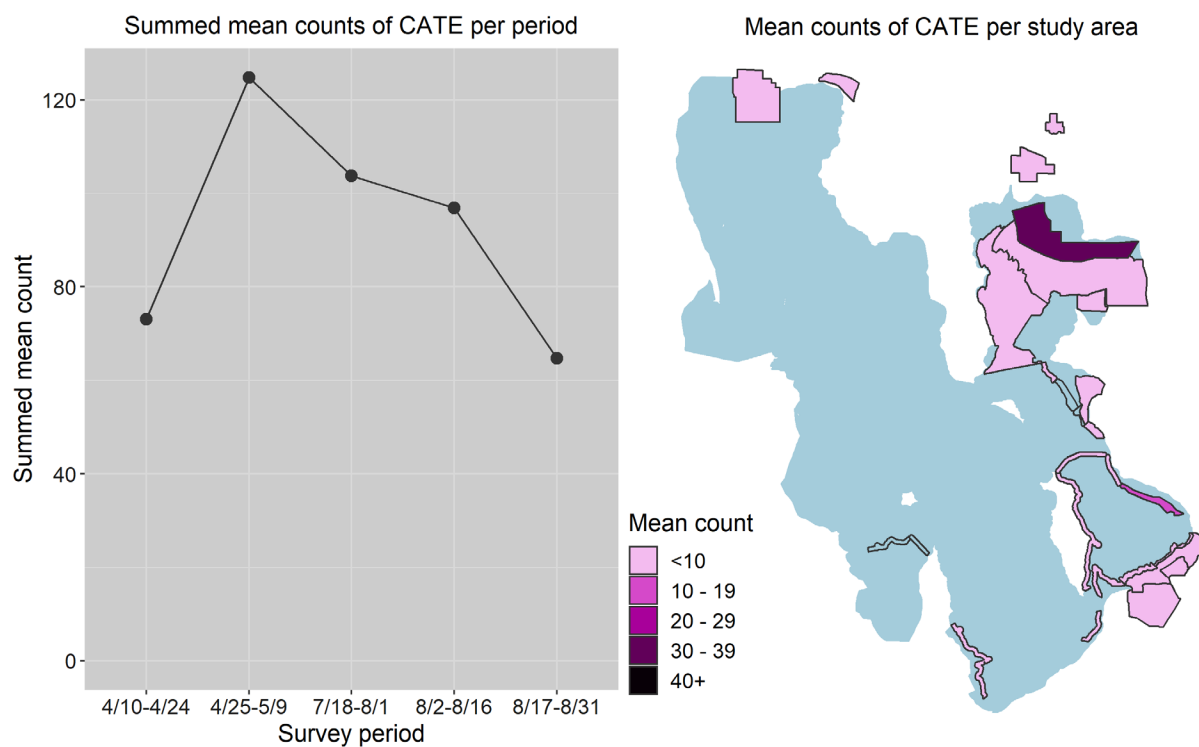
Canvasback

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring	Peak Period 1	High Count 2013	Abundance Status
CANV	619,700	559,900	651	1,145	3,556	C



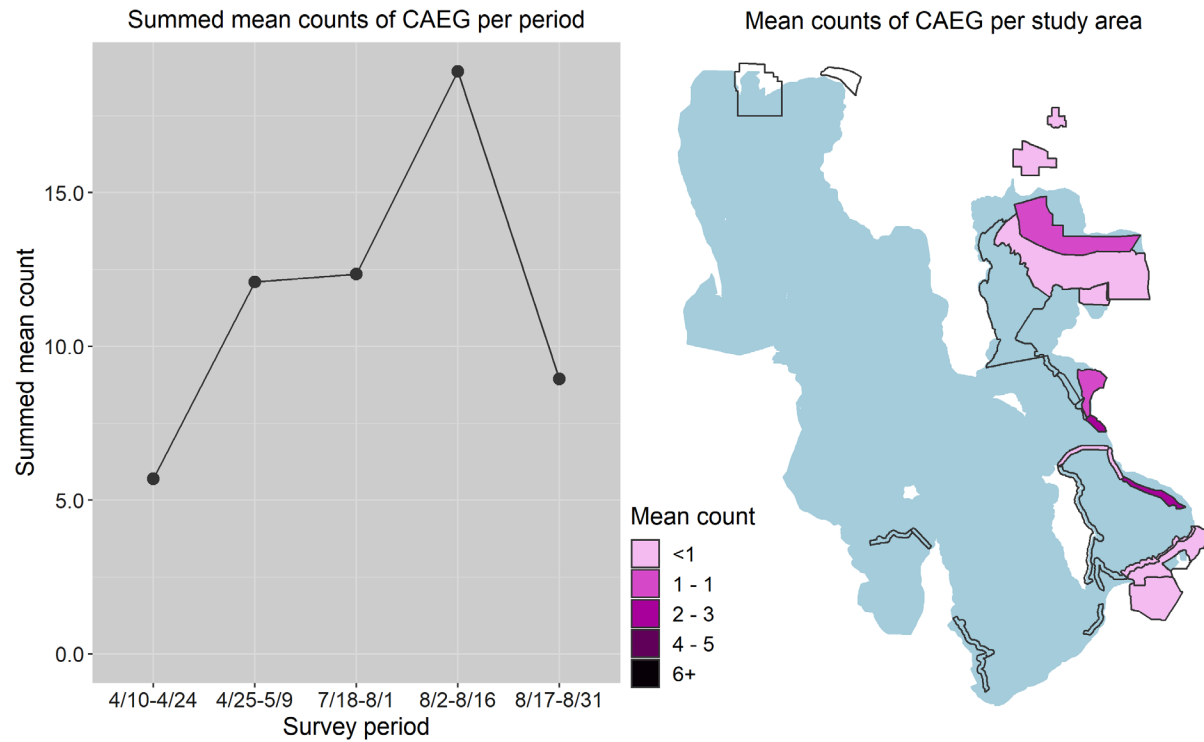
Caspian Tern

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 2	High Count 2012	Abundance Status
CATE	NA	<70,000 br	93	125	438	U



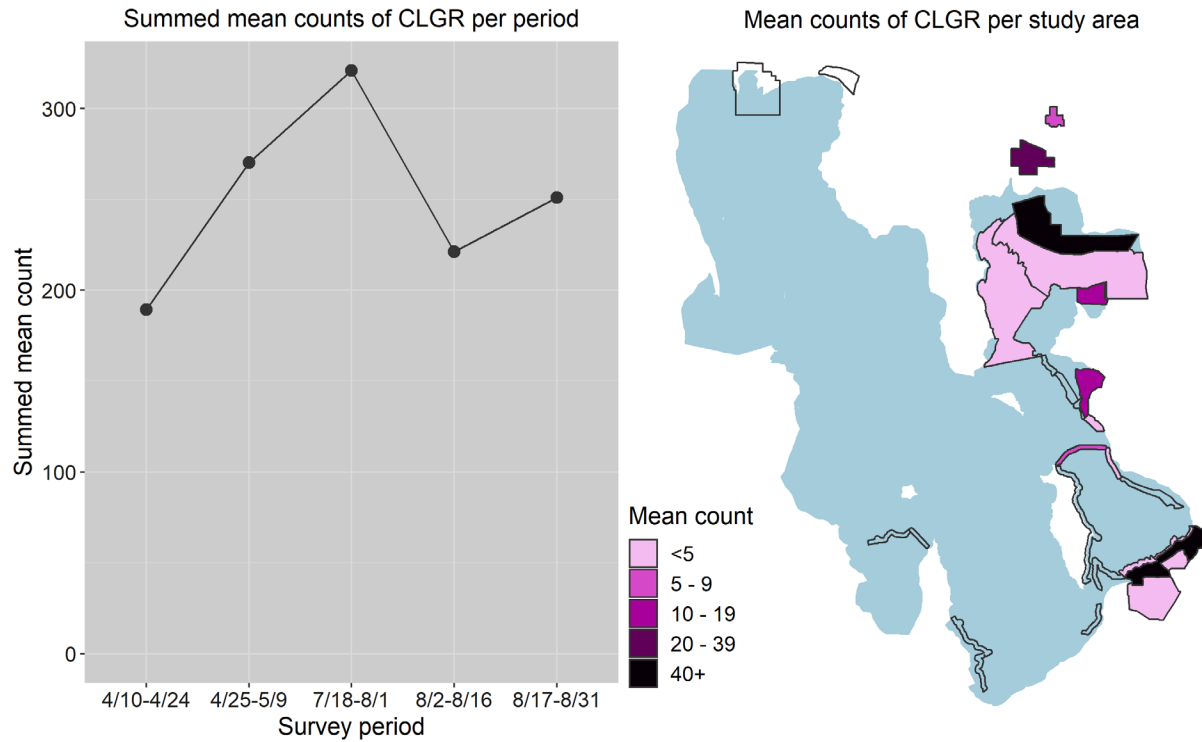
Cattle Egret

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 4	High Count 1999	Abundance Status
CAEG	NA	NA	12	19	71	C



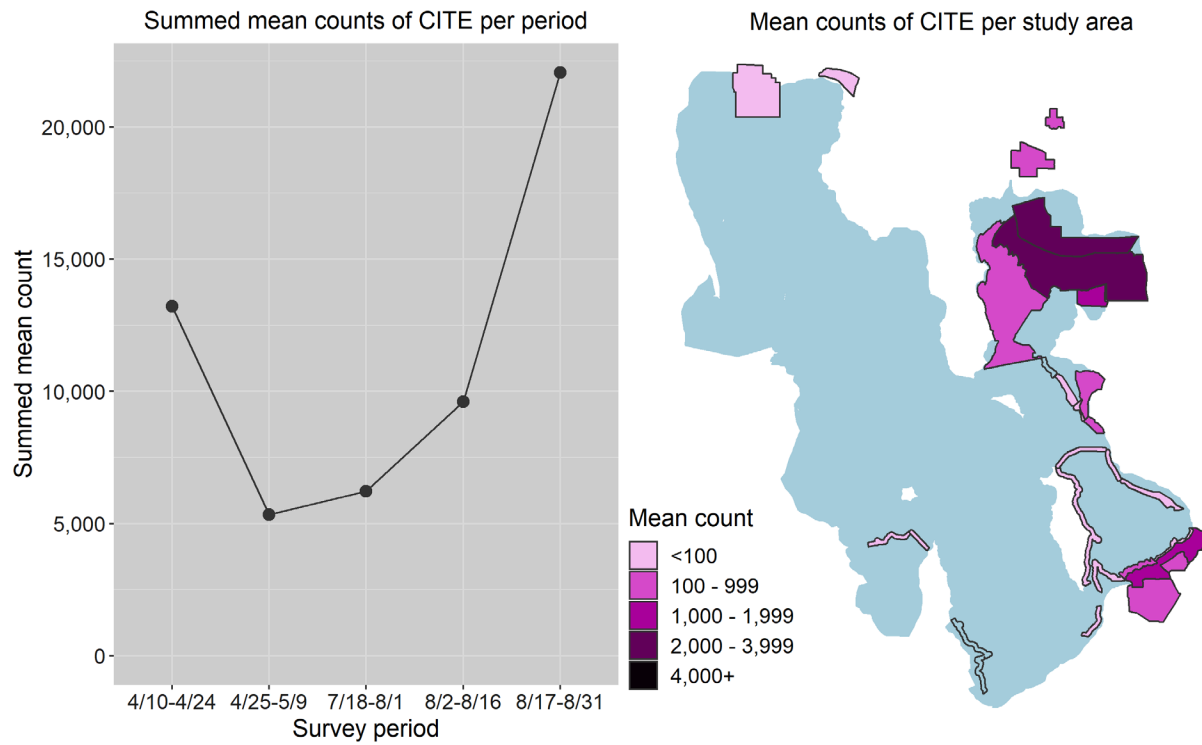
Clark's Grebe

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 3	High Count 2016	Abundance Status
CLGR	<20,000	<20,000	250	321	1,088	C



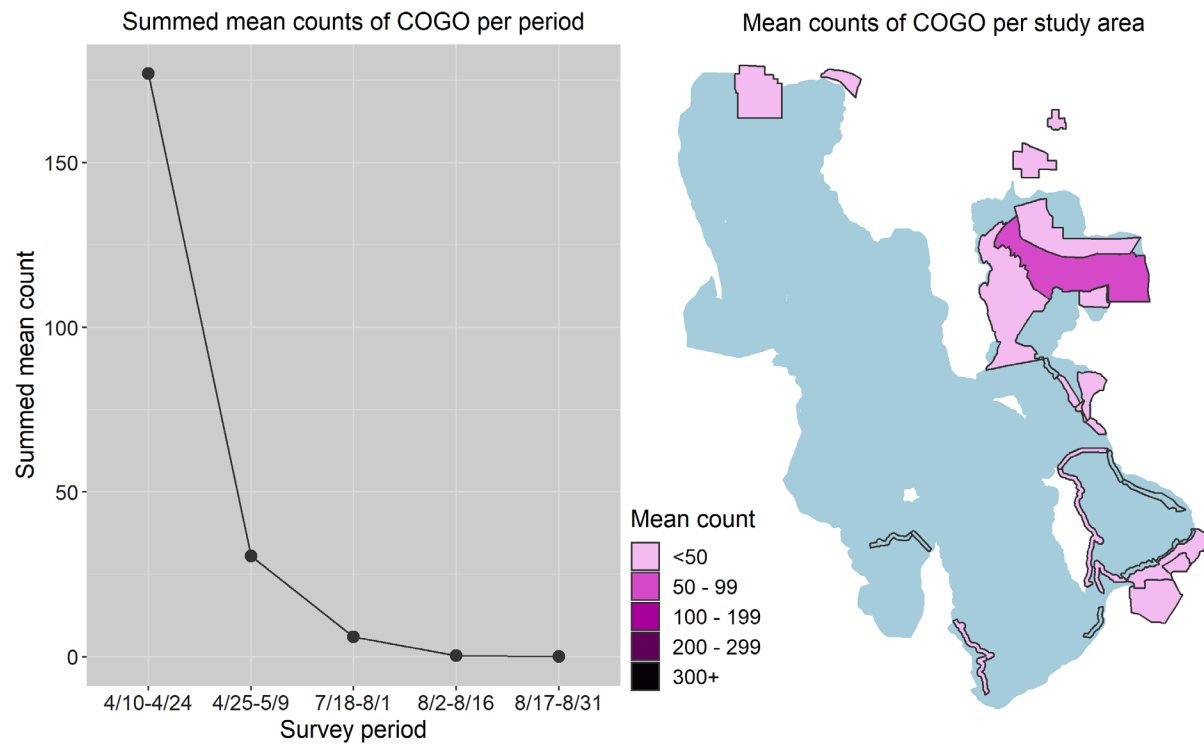
Cinnamon Teal

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 5	High Count 2009	Abundance Status
CITE	NA	NA	12,632	22,059	39,357	C



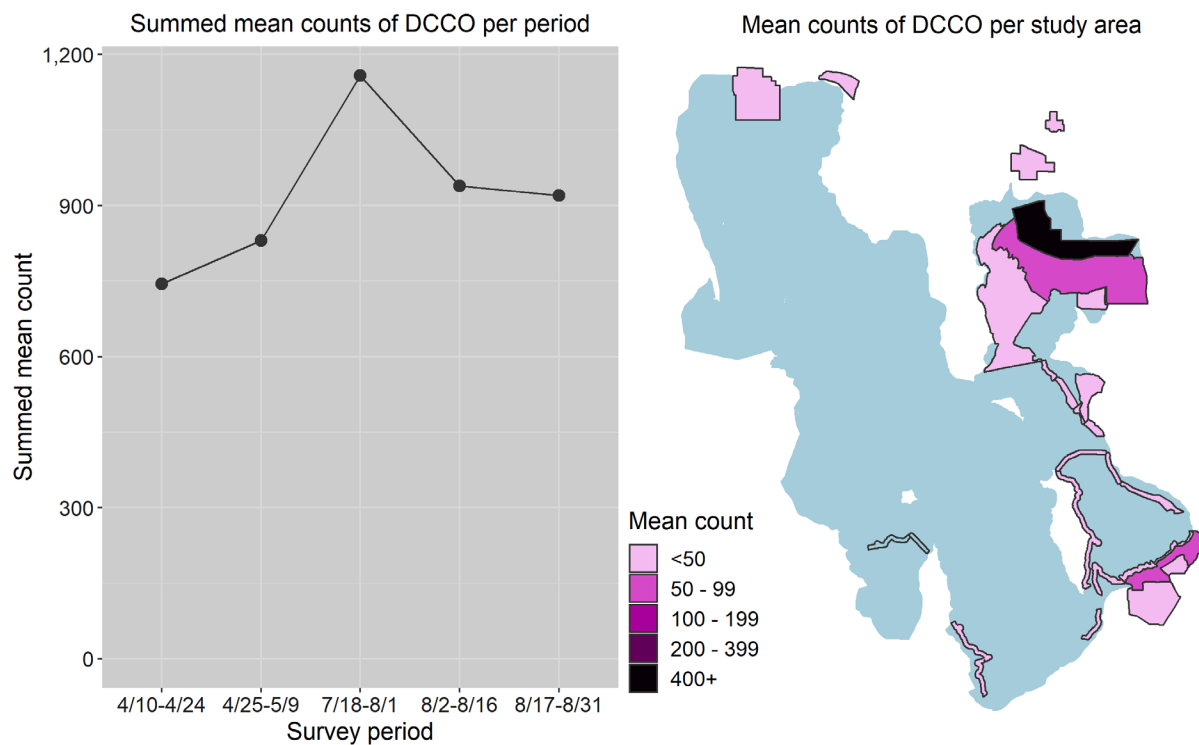
Common Goldeneye

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring	Peak Period 1	High Count 2006	Abundance Status
COGO	1,170,000	750,000	104	177	473	C



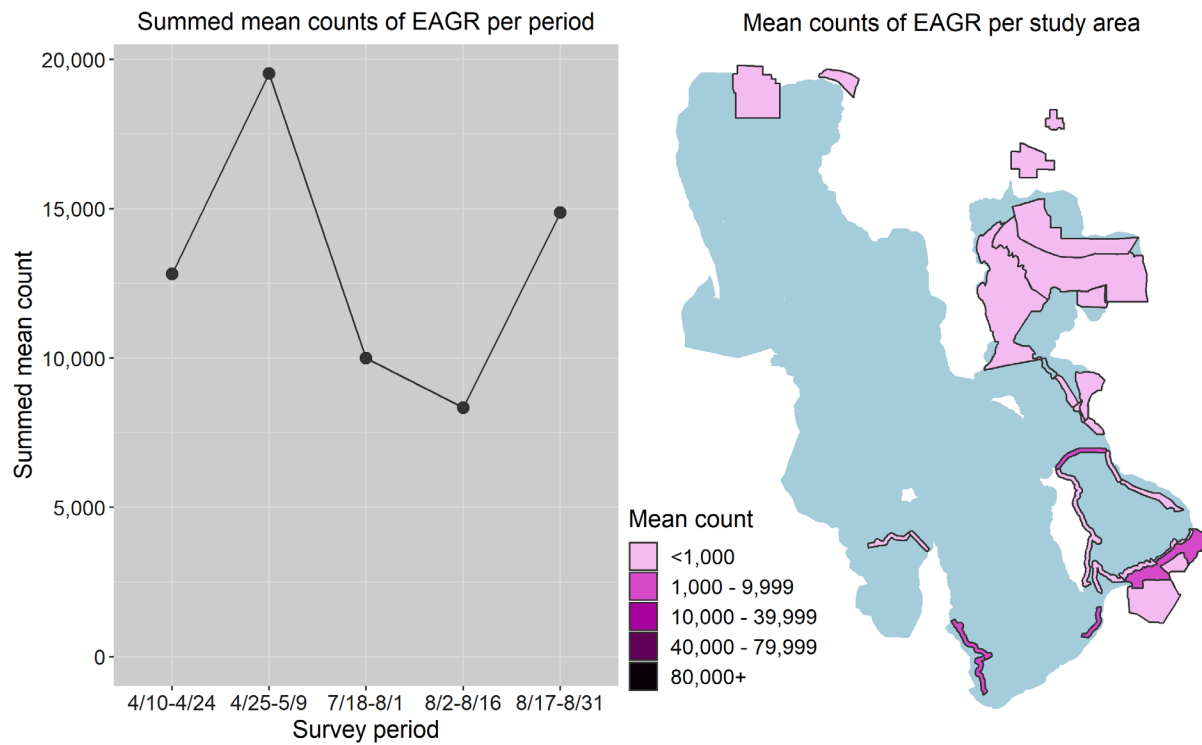
Double-crested Cormorant

Population Estimates			Great Salt Lake			
Code	Global	North America	Mean Spring and Fall	Peak Period 3	High Count 2015	Abundance Status
DCCO	>1,500,00 br	>1,500,000 br	919	1,158	1,688	C



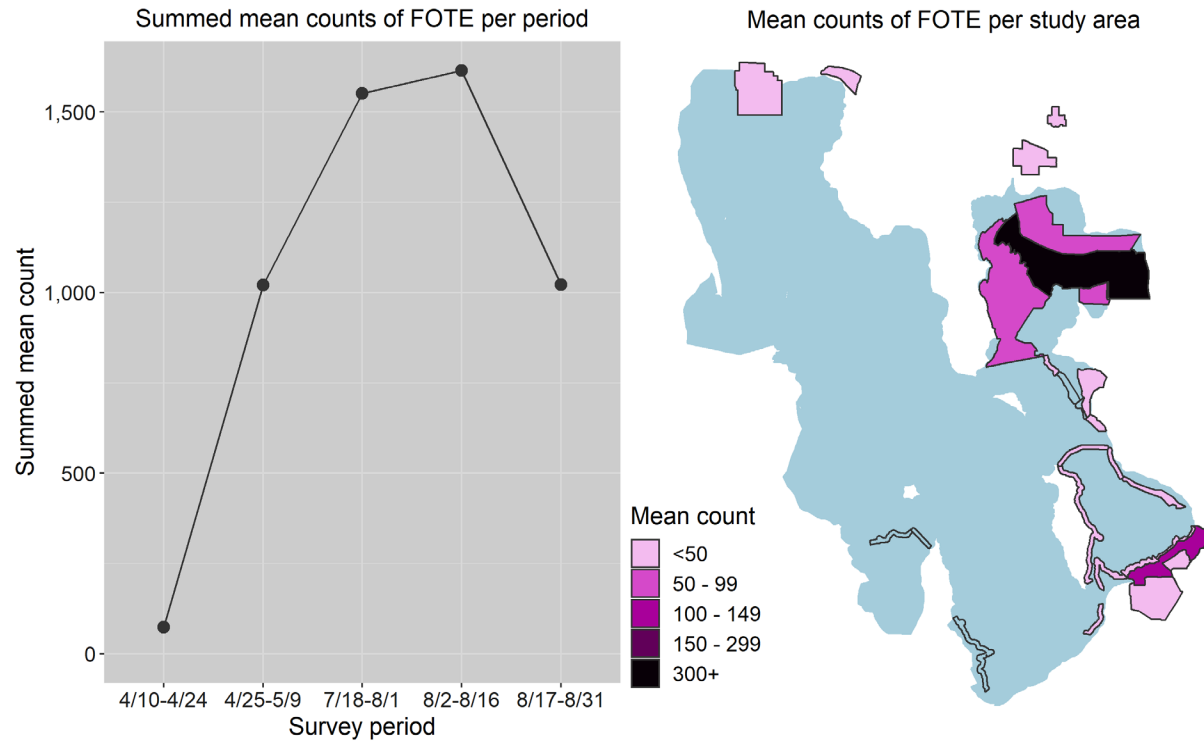
Eared Grebe

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 2	High Count 2015	Abundance Status
EAGR	4,000,000	3,700,000	11,069	19,529	55,587	C



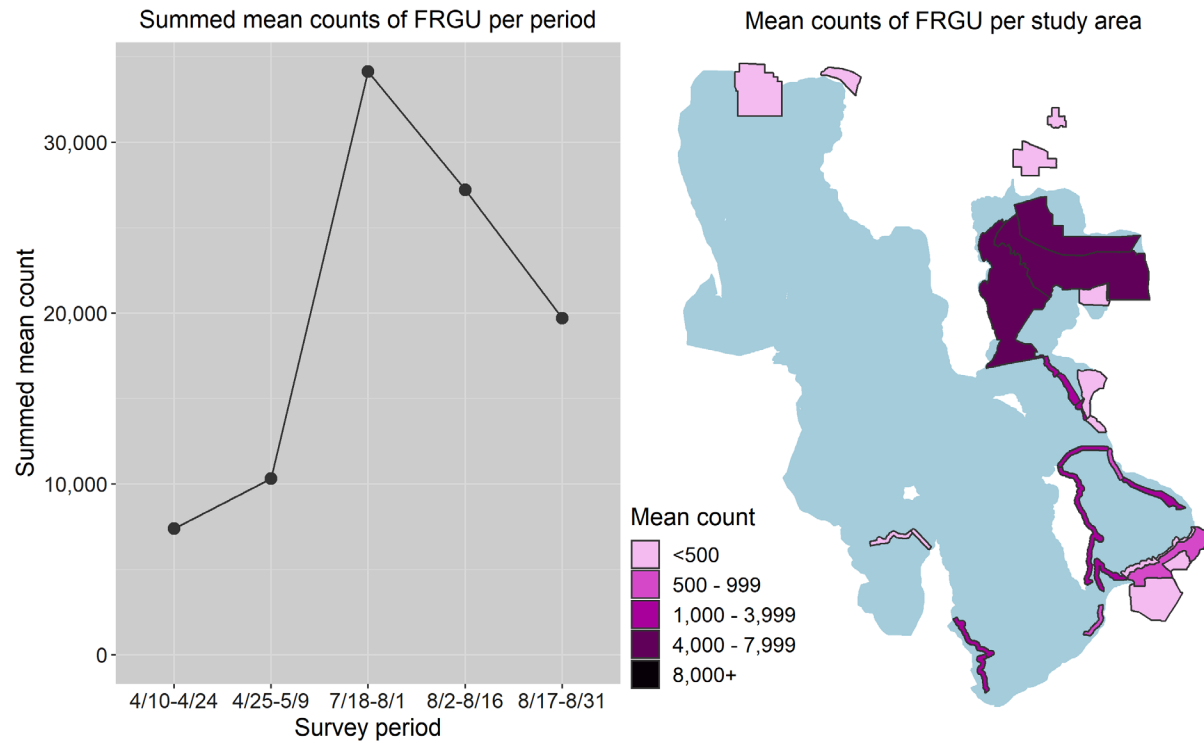
Forster's Tern

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 4	High Count 2011	Abundance Status
FOTE	40,000	40,000	1,056	1,614	4,519	C



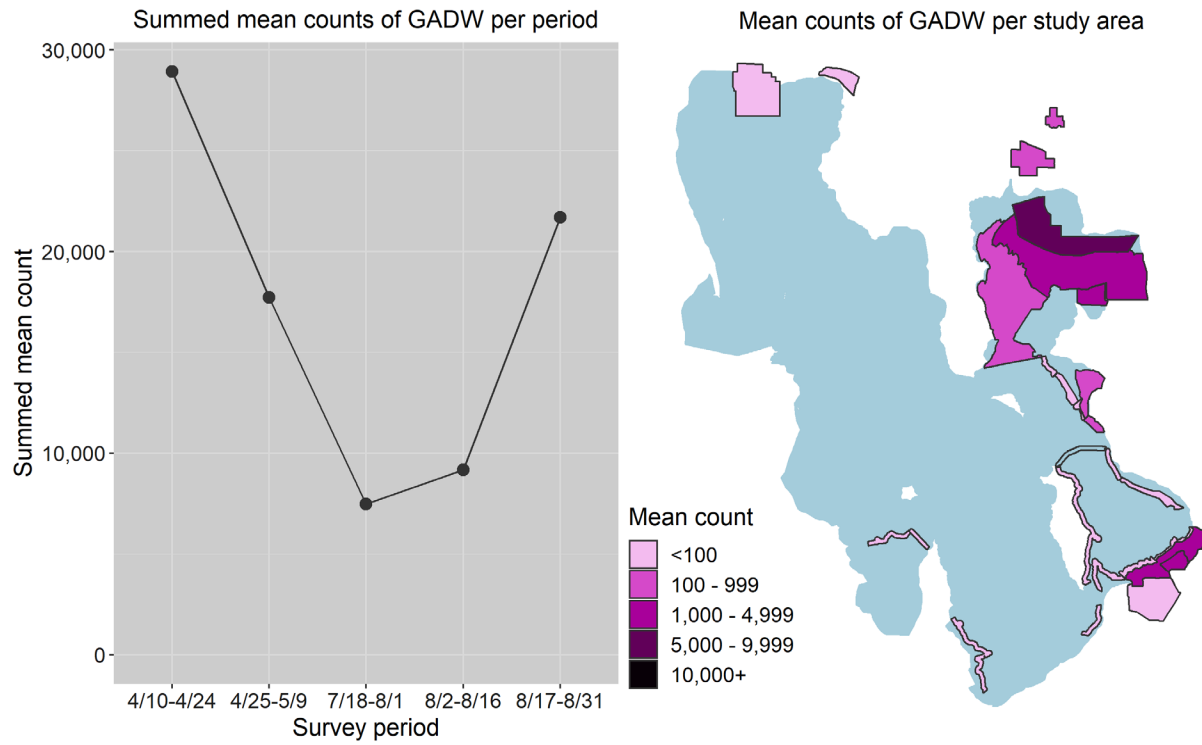
Franklin's Gull

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 3	High Count 2006	Abundance Status
FRGU	NA	<991,000 br	27,012	34,136	46,938	C



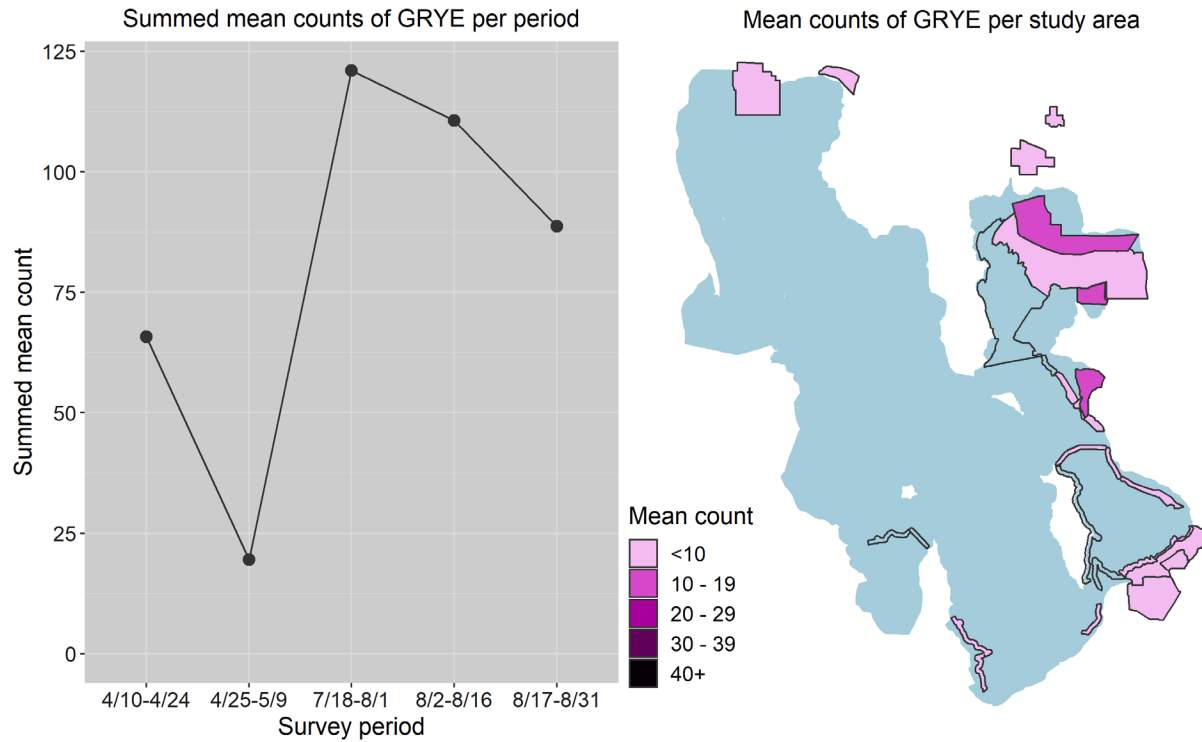
Gadwall

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 1	High Count 2015	Abundance Status
GADW	2,795,200	2,385,200	12,776	28,929	47,402	C



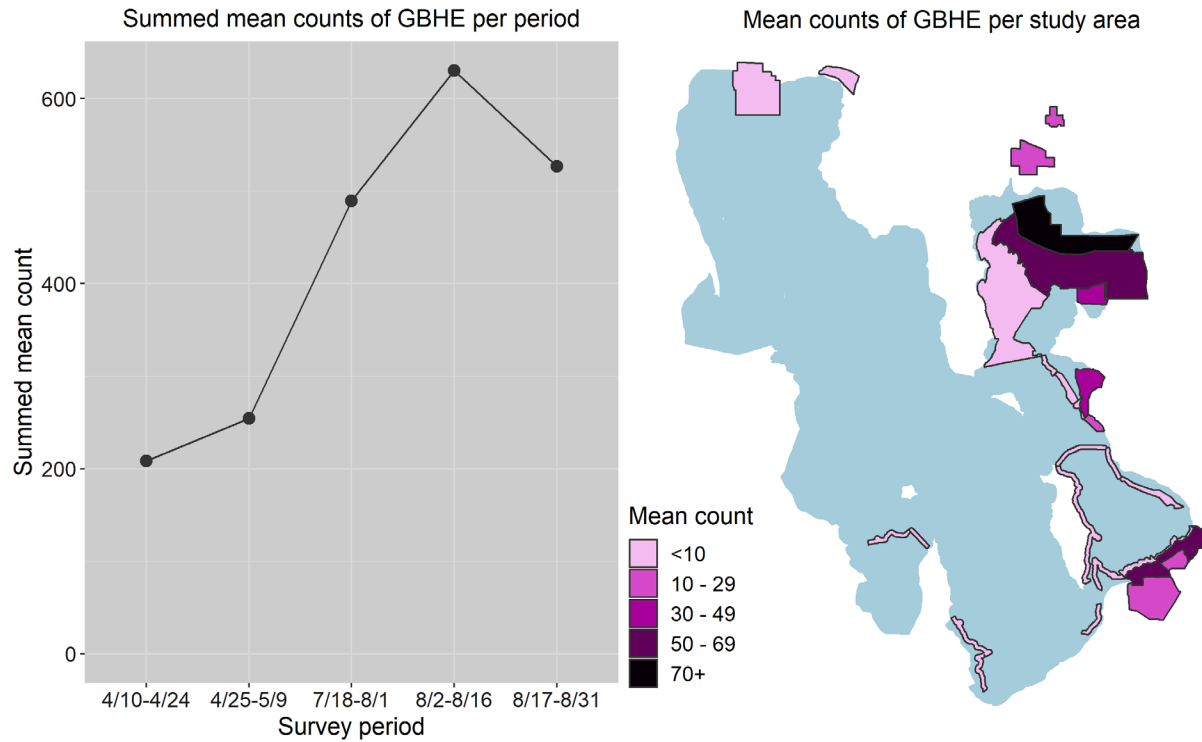
Greater Yellowlegs

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 3	High Count 2004	Abundance Status
GRYE	100,000	100,000	81	121	461	C



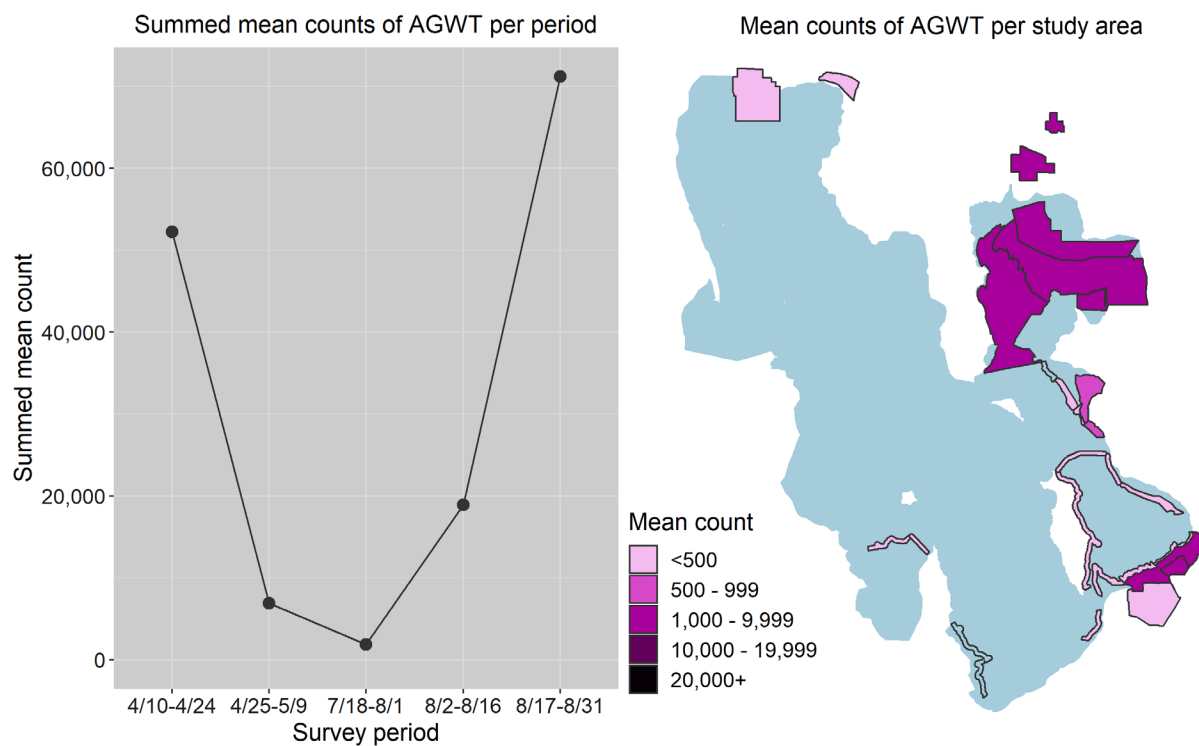
Great Blue Heron

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 4	High Count 2006	Abundance Status
GBHE	NA	83,000 br	422	630	789	C



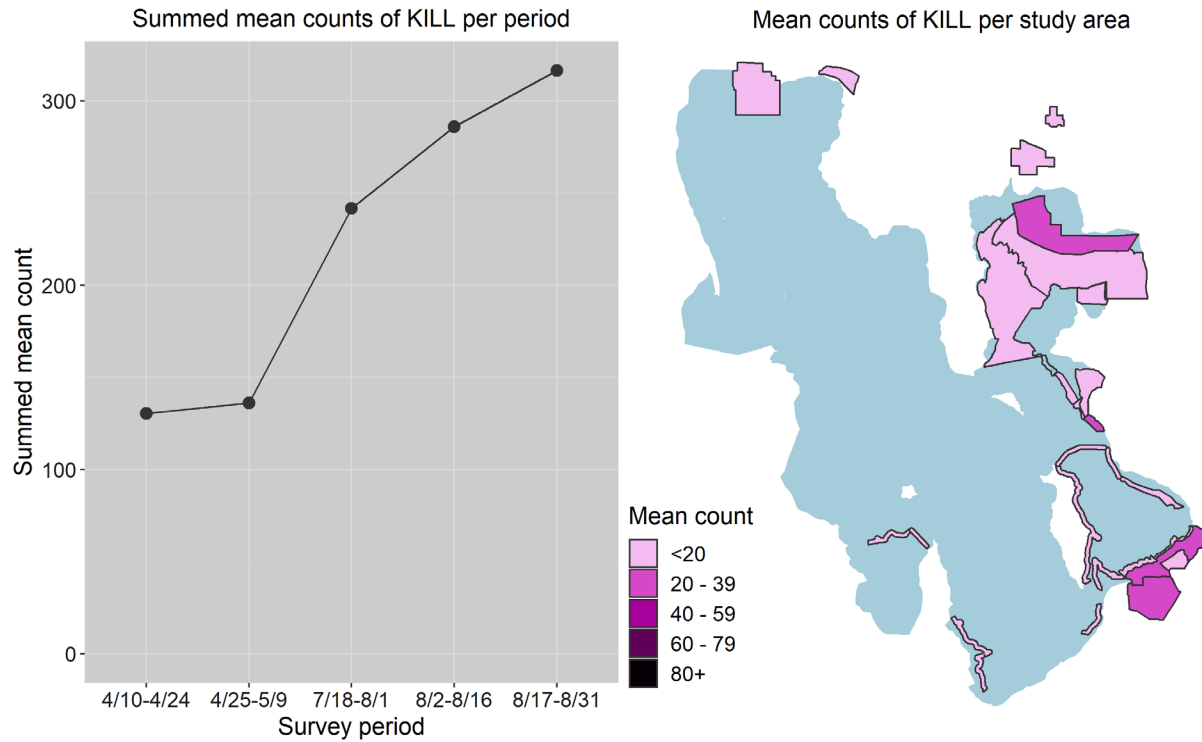
Green-winged Teal

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 5	High Count 2017	Abundance Status
AGWT	5,446,400	2,136,400	30,664	71,201	121,132	C



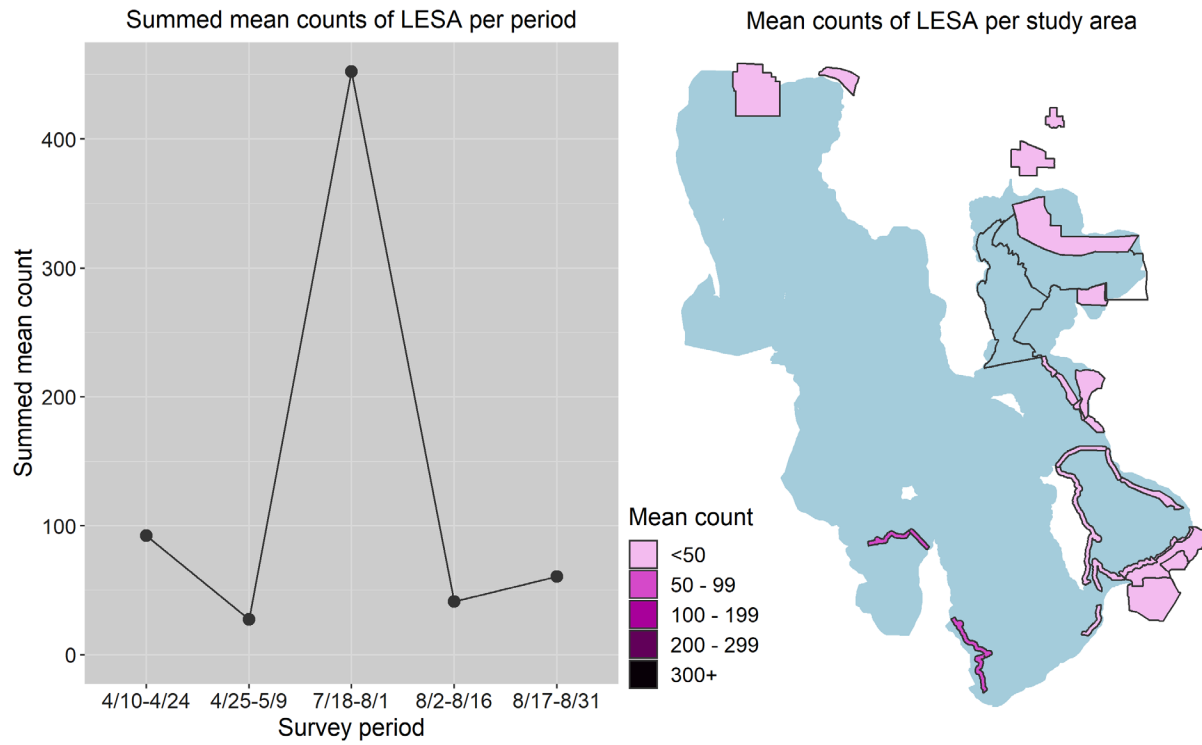
Killdeer

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 5	High Count 2017	Abundance Status
KILL	1,000,000	1,000,000	222	316	554	C



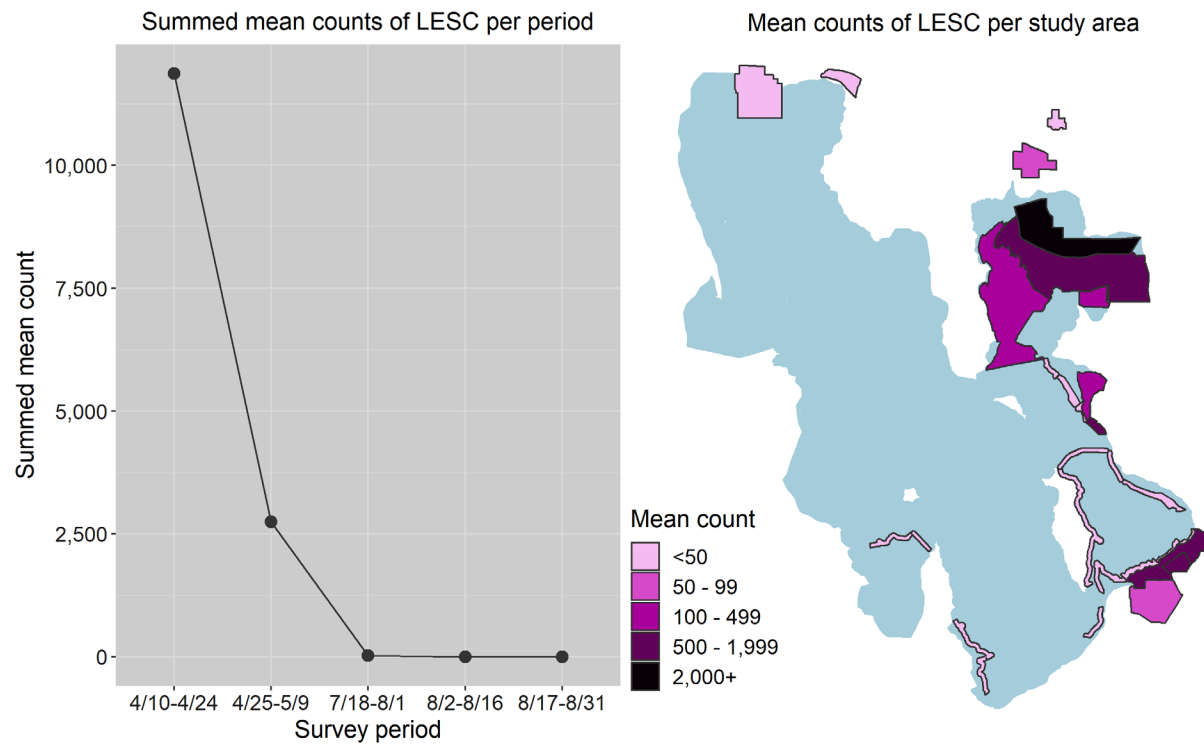
Least Sandpiper

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 3	High Count 1998	Abundance Status
LESA	600,000	600,000	185	452	4,815	C



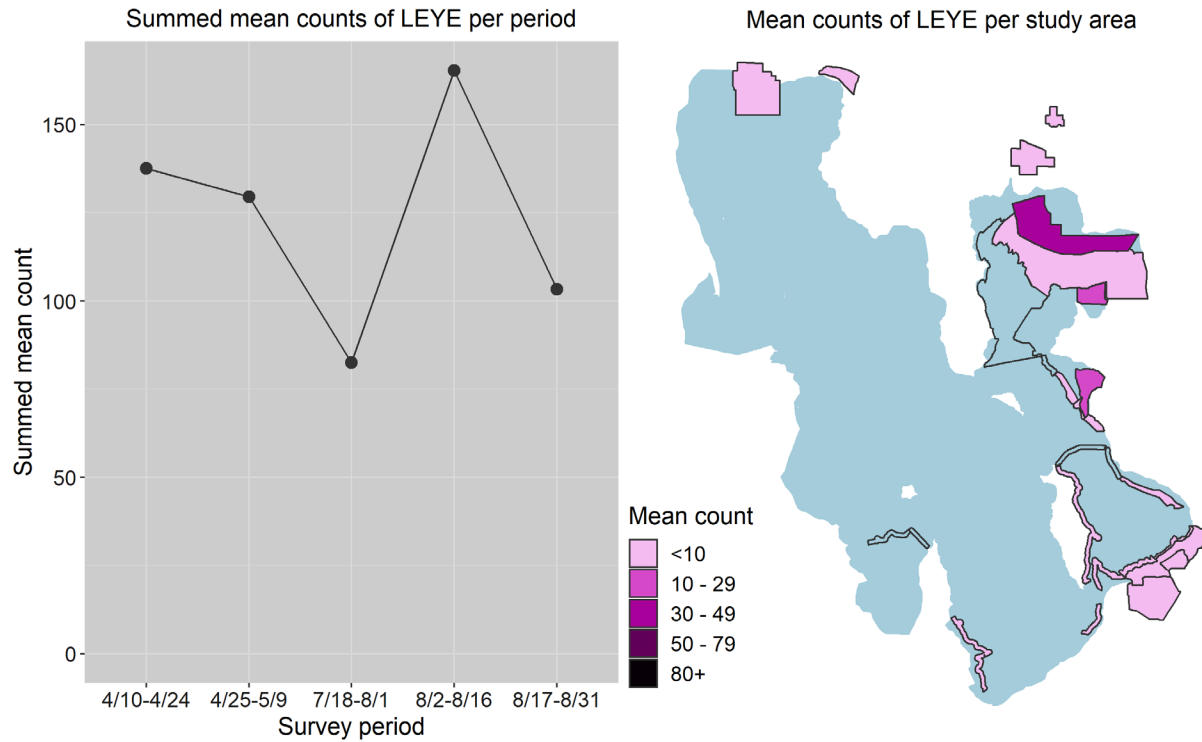
Lesser Scaup

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring	Peak Period 1	High Count 2014	Abundance Status
LESC	NA	NA	7,306	11,867	18,818	C



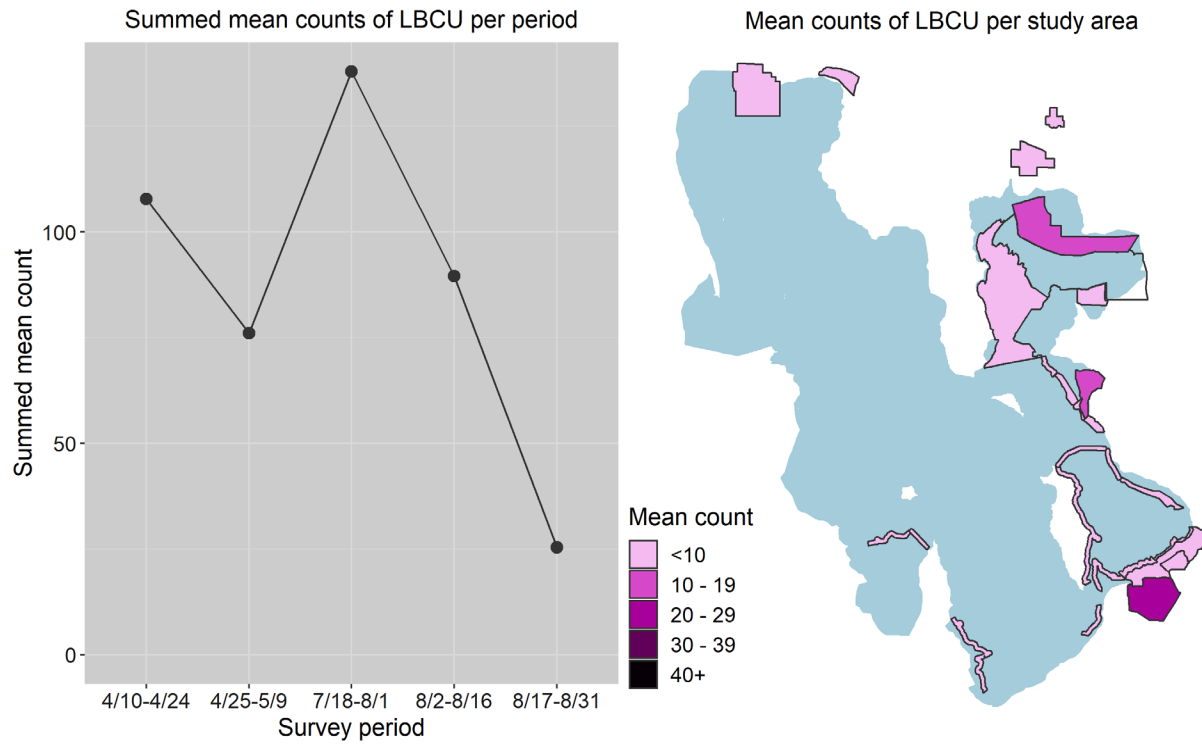
Lesser Yellowlegs

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 4	High Count 2007	Abundance Status
LEYE	500,000	500,000	124	165	603	C



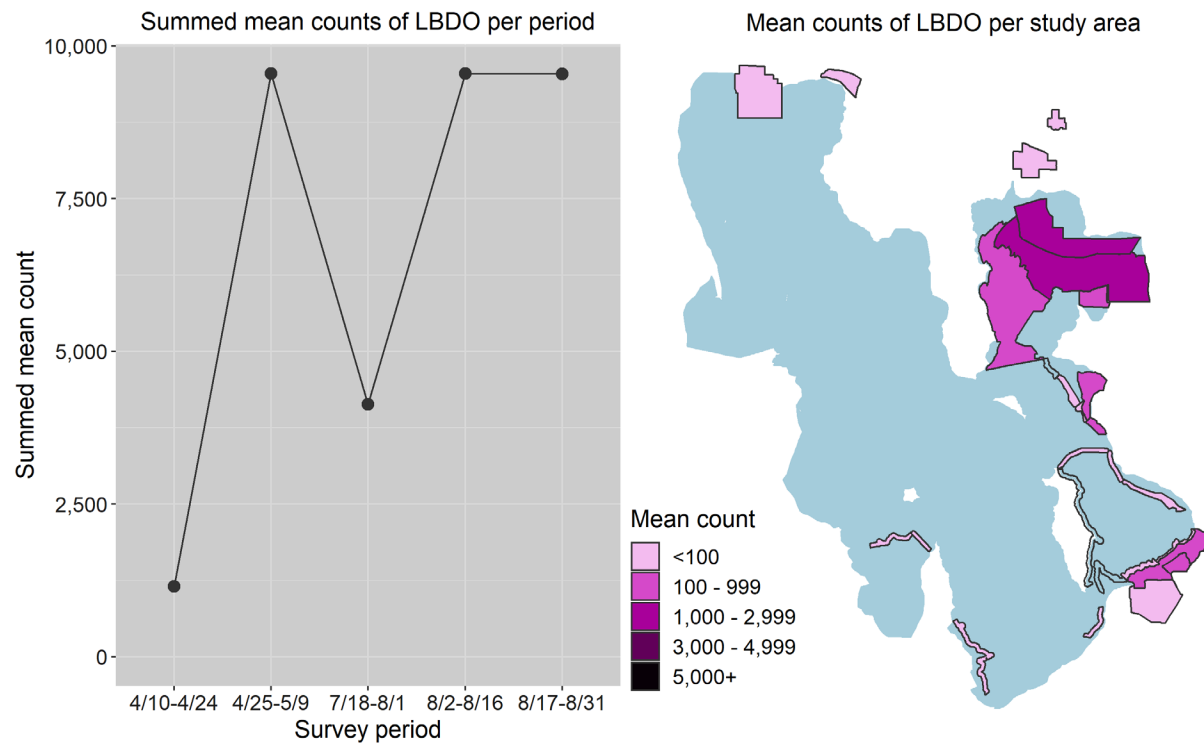
Long-billed Curlew

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring	Peak Period 3	High Count 2009	Abundance Status
LBCU	20,000	20,000	92	138	763	C



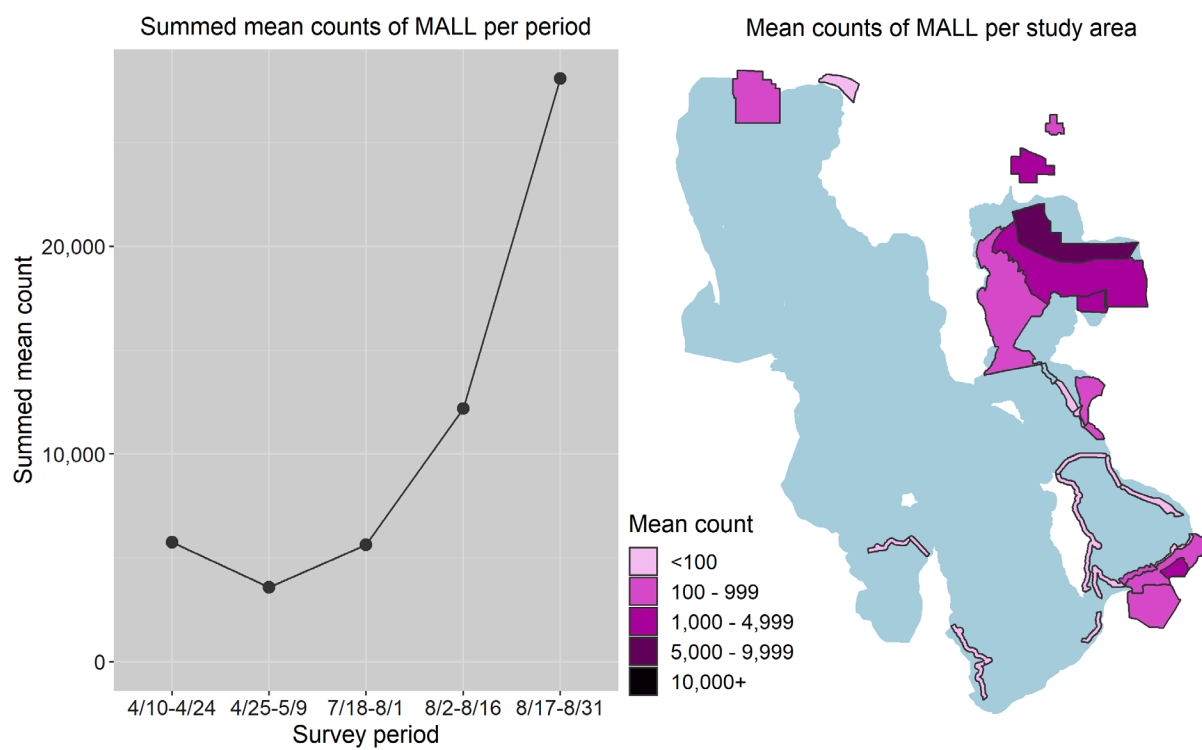
Long-billed Dowitcher

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 2	High Count 2009	Abundance Status
LBDO	500,000	500,000	7,741	9,548	25,210	C



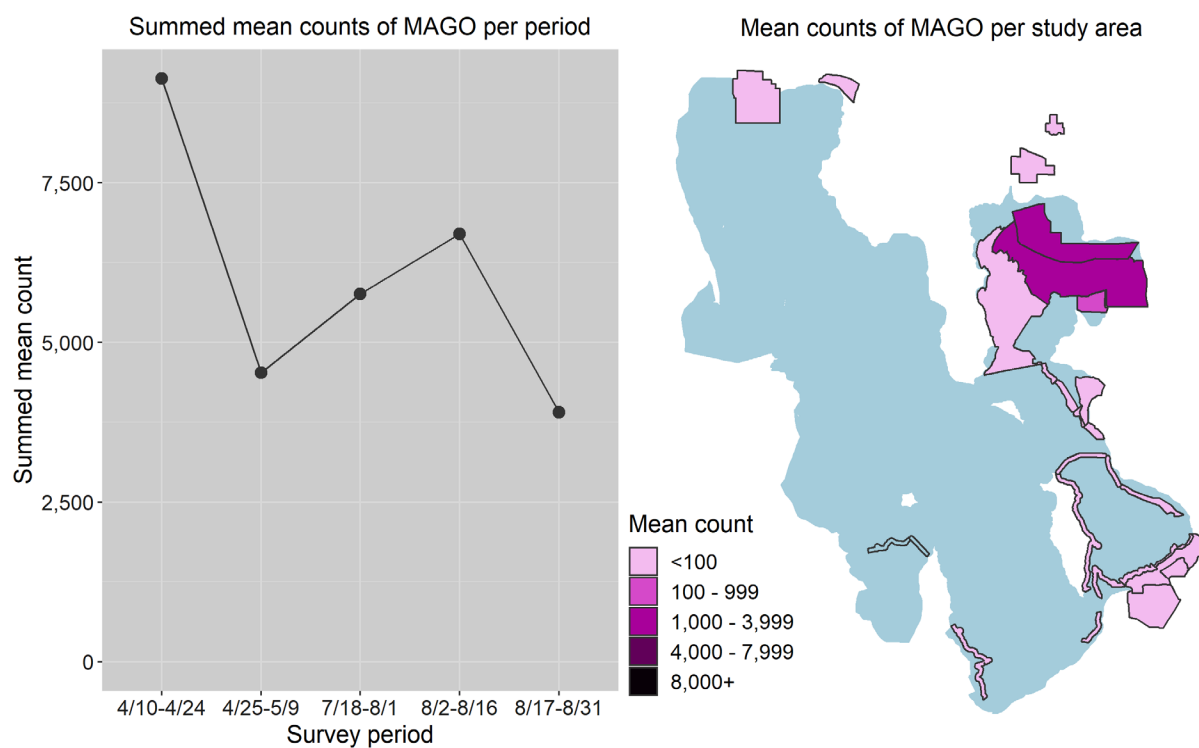
Mallard

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 5	High Count 2004	Abundance Status
MALL	16,482,600	7,494,300	15,302	28,082	29,913	C



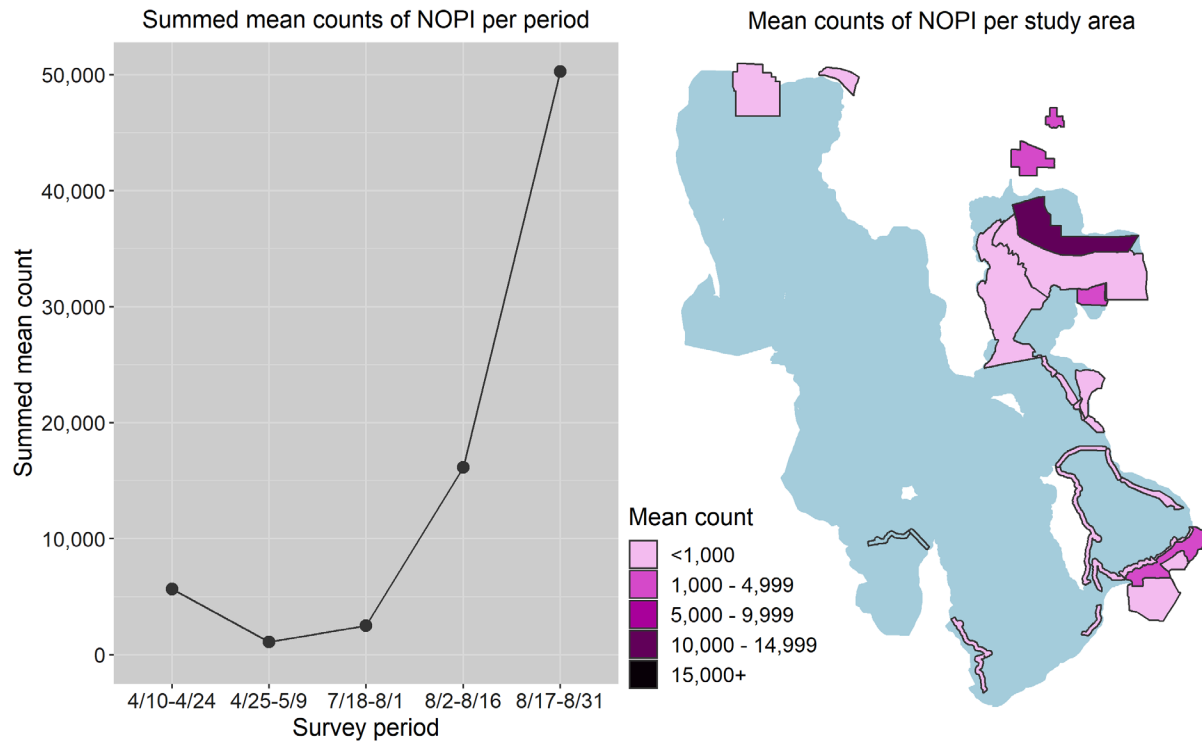
Marbled Godwit

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 1	High Count 2010	Abundance Status
MAGO	171,500	171,500	5,454	9,133	17,116	C



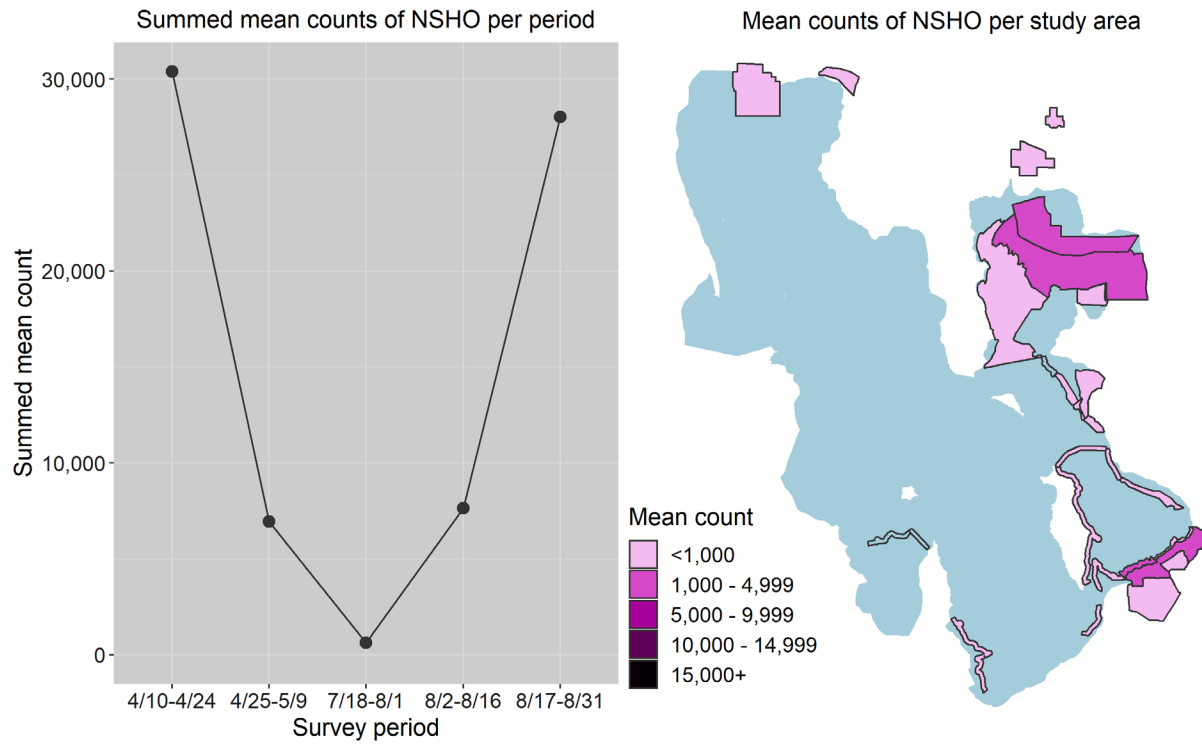
Northern Pintail

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 5	High Count 1997	Abundance Status
NOPI	4,484,800	2,524,800	22,972	50,273	77,391	C



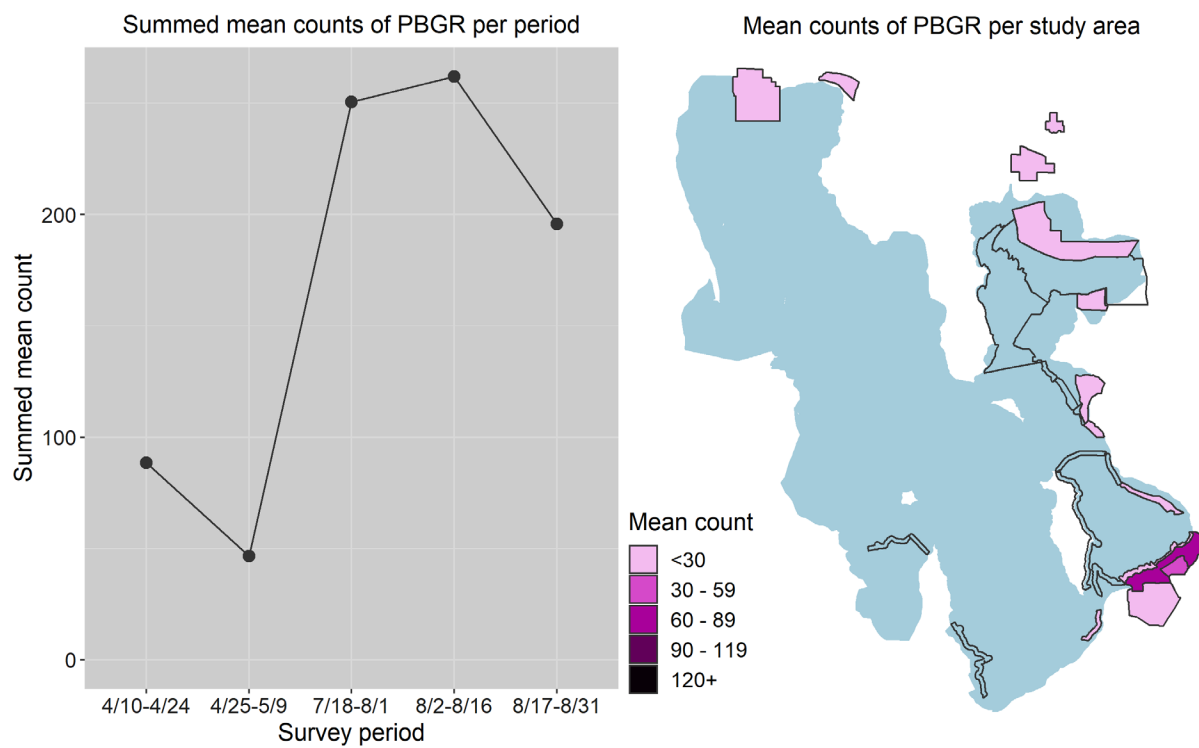
Northern Shoveler

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 1	High Count 2014	Abundance Status
NSHO	3,533,400	2,041,100	12,101	30,391	43,888	C



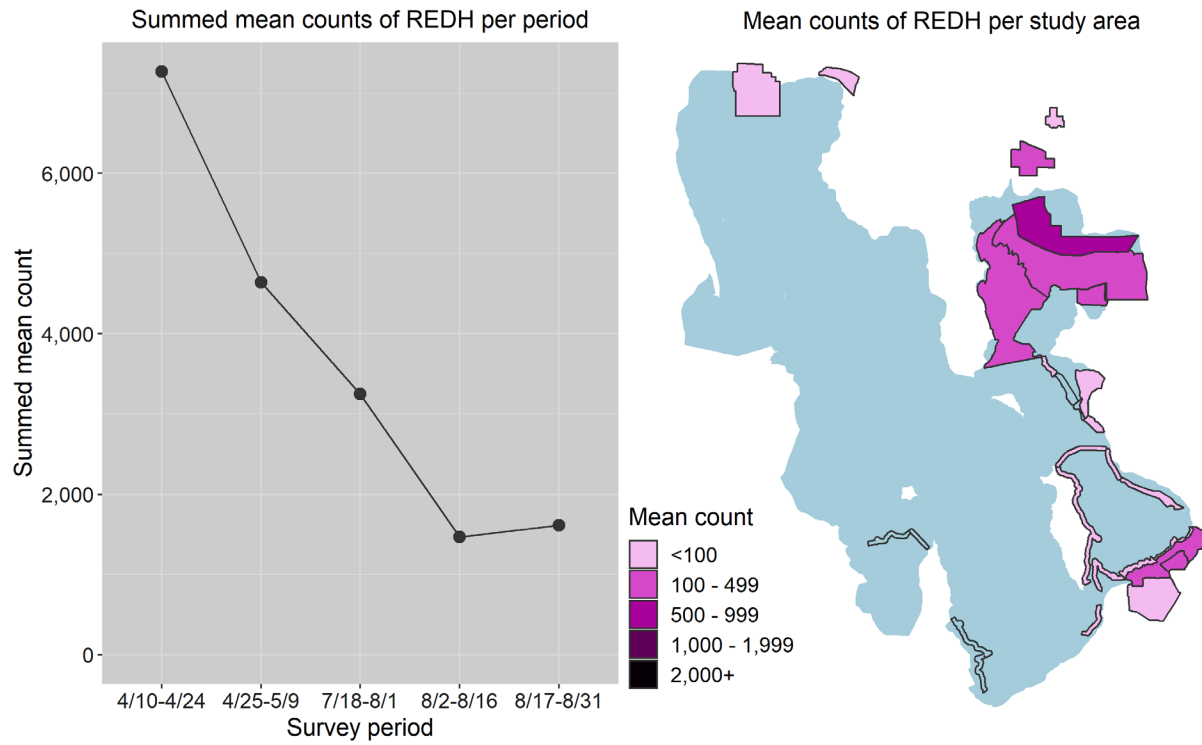
Pied-billed Grebe

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 4	High Count 2005	Abundance Status
PBGR	100,000	<40,000	236	262	696	C



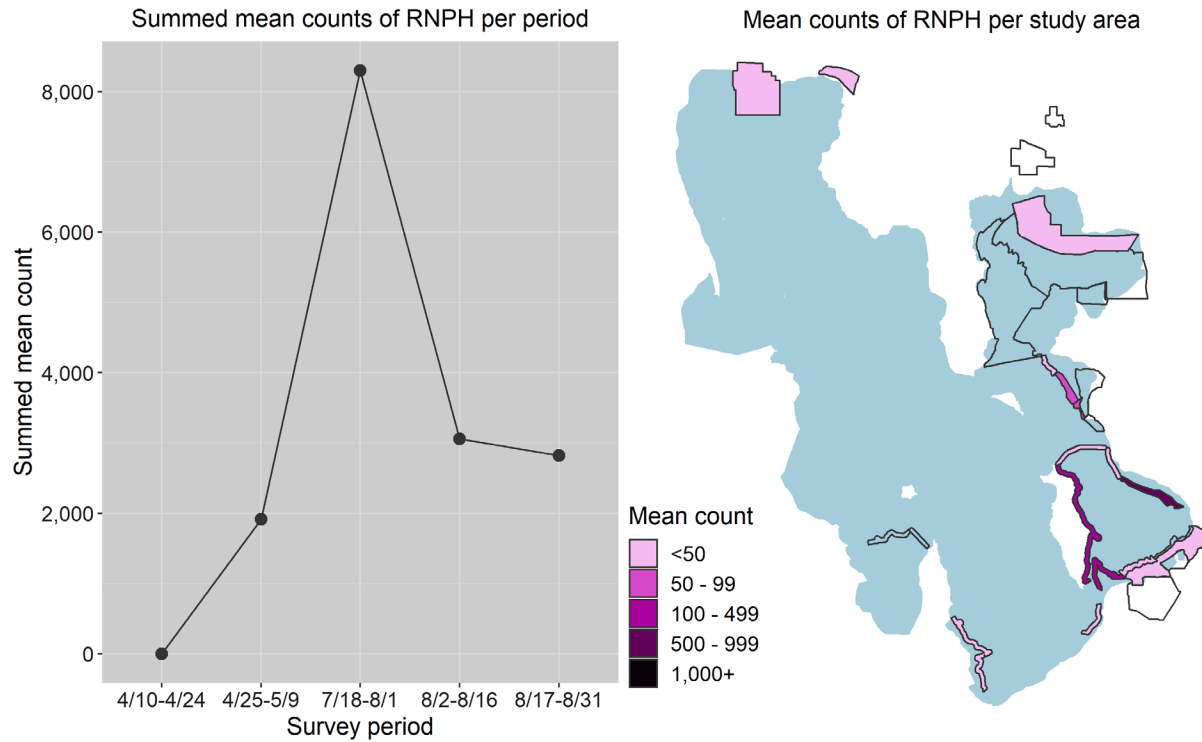
Redhead

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 1	High Count 2014	Abundance Status
REDH	691,400	691,400	2,112	7,268	18,712	C



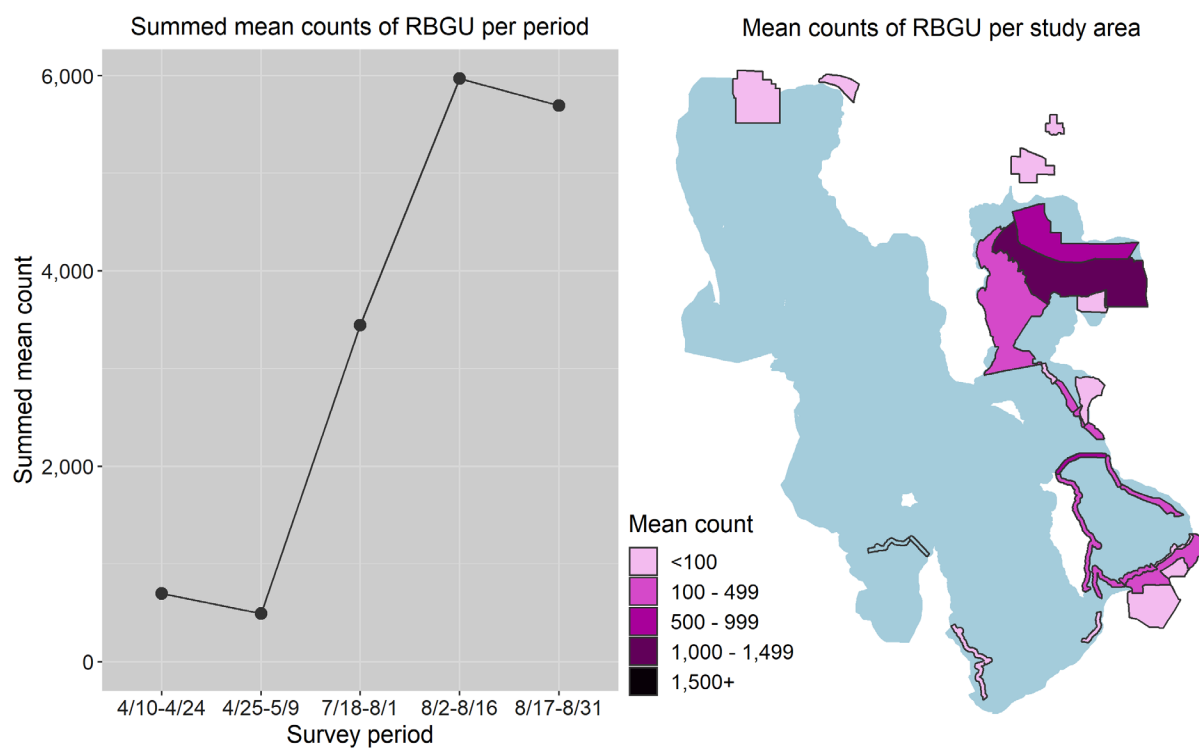
Red-necked Phalarope

Population Estimates			Great Salt Lake			
Code	Global	North America	Mean Spring	Peak Period 3	High Count 2004	Abundance Status
RNPH	4,000,000	2,500,000	959	8,300	40,510	C



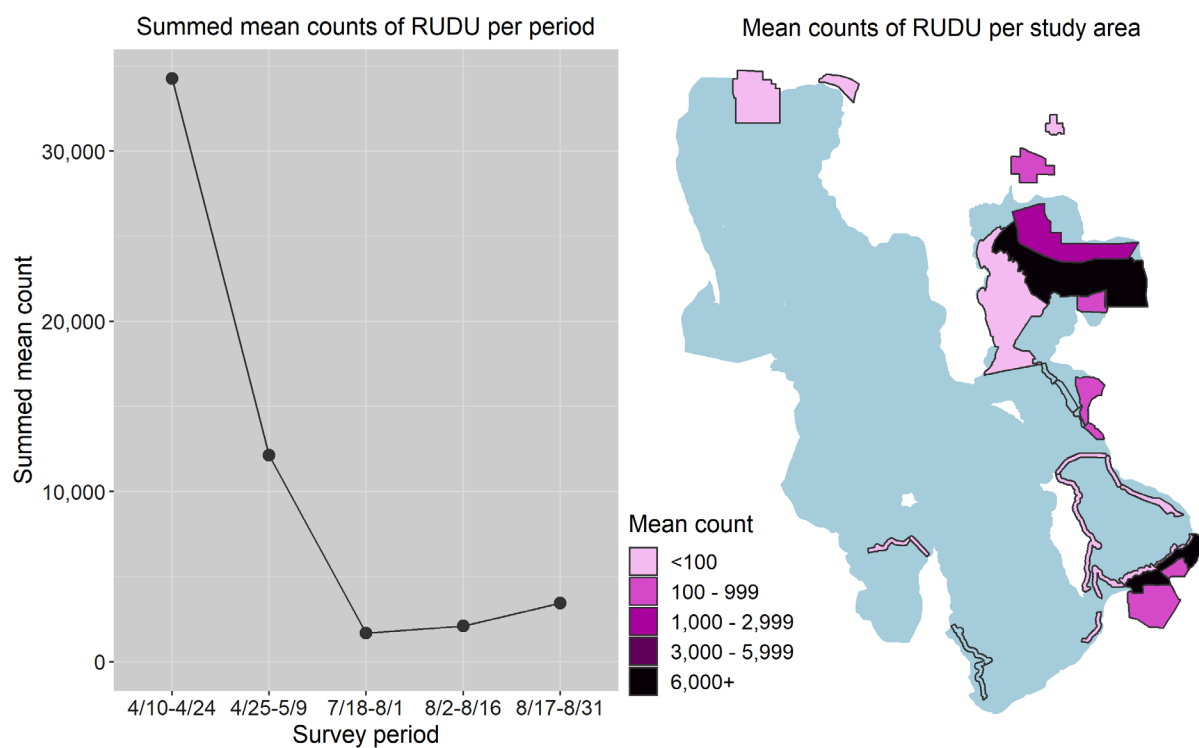
Ring-billed Gull

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 4	High Count 2012	Abundance Status
RBGU	3,500,000	1,700,000 br	5,037	5,970	15,114	C



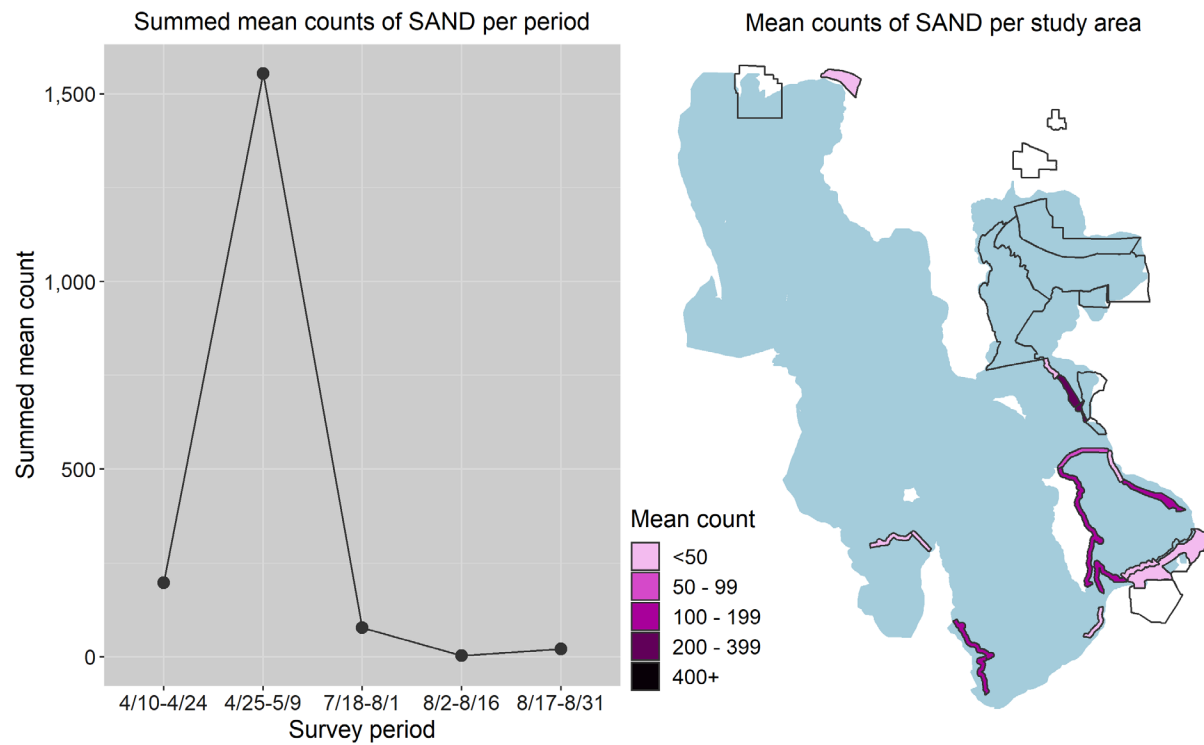
Ruddy Duck

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring	Peak Period 1	High Count 2015	Abundance Status
RUDU	690,000	409,783	23,207	34,272	57,444	C



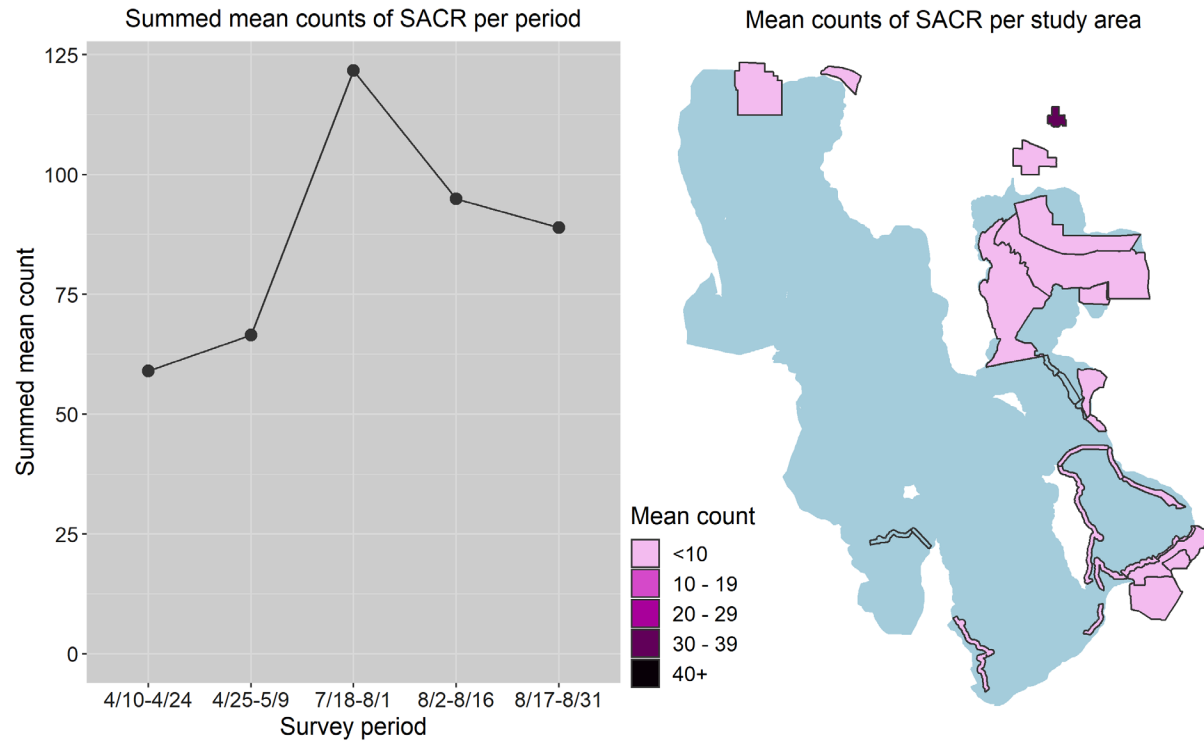
Sanderling

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring	Peak Period 2	High Count 2006	Abundance Status
SAND	643,000	300,000	876	1,554	3,305	C



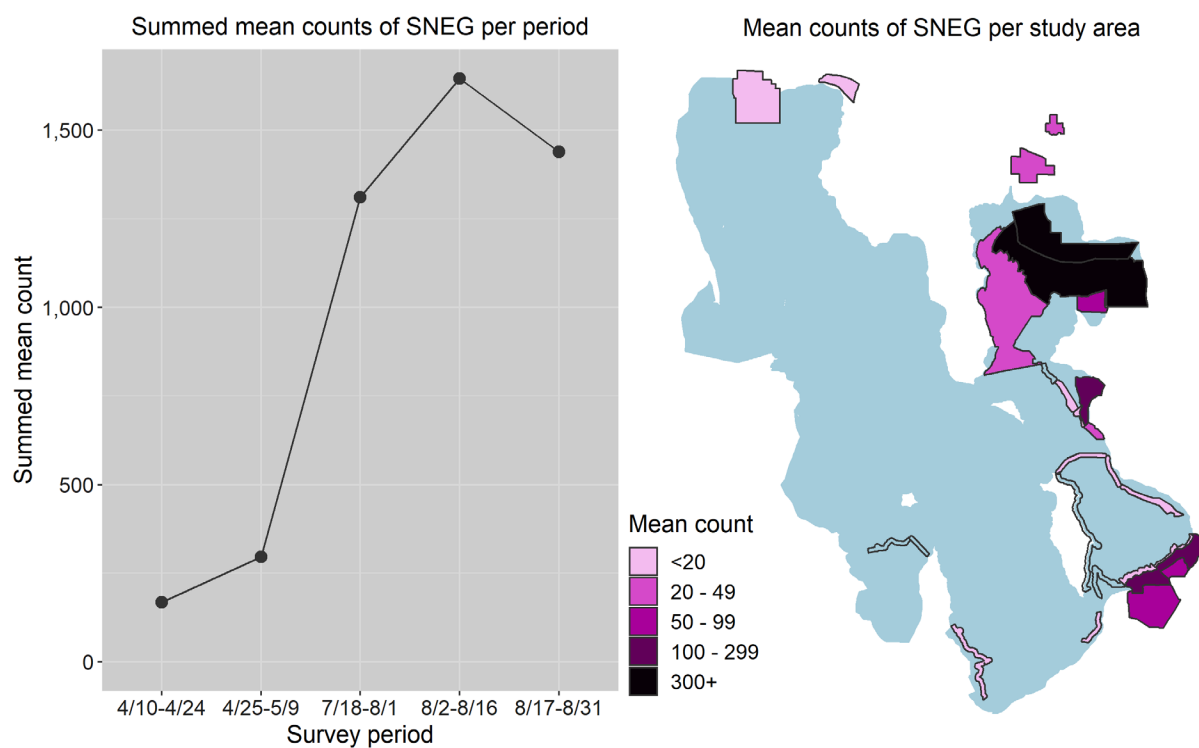
Sandhill Crane

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 3	High Count 2008	Abundance Status
SACR	526,000	526,000	86	122	279	C



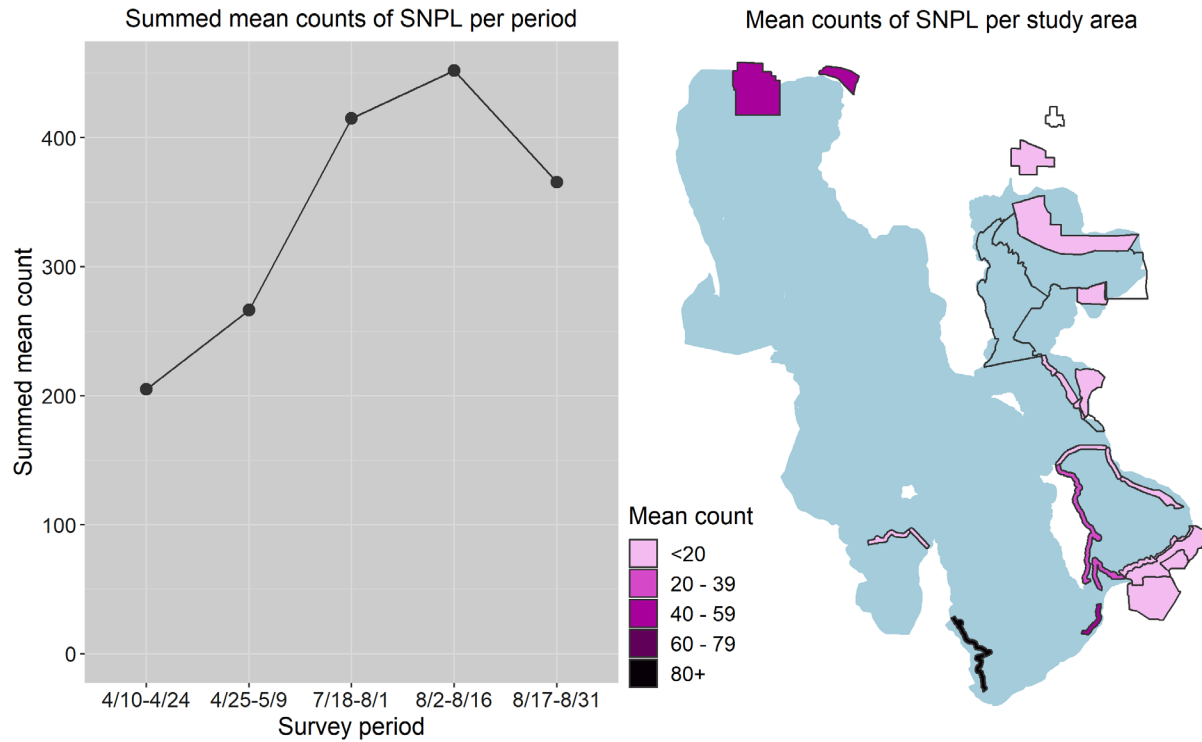
Snowy Egret

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 4	High Count 2009	Abundance Status
SNEG	NA	>40,000	1,465	1,646	3,477	C



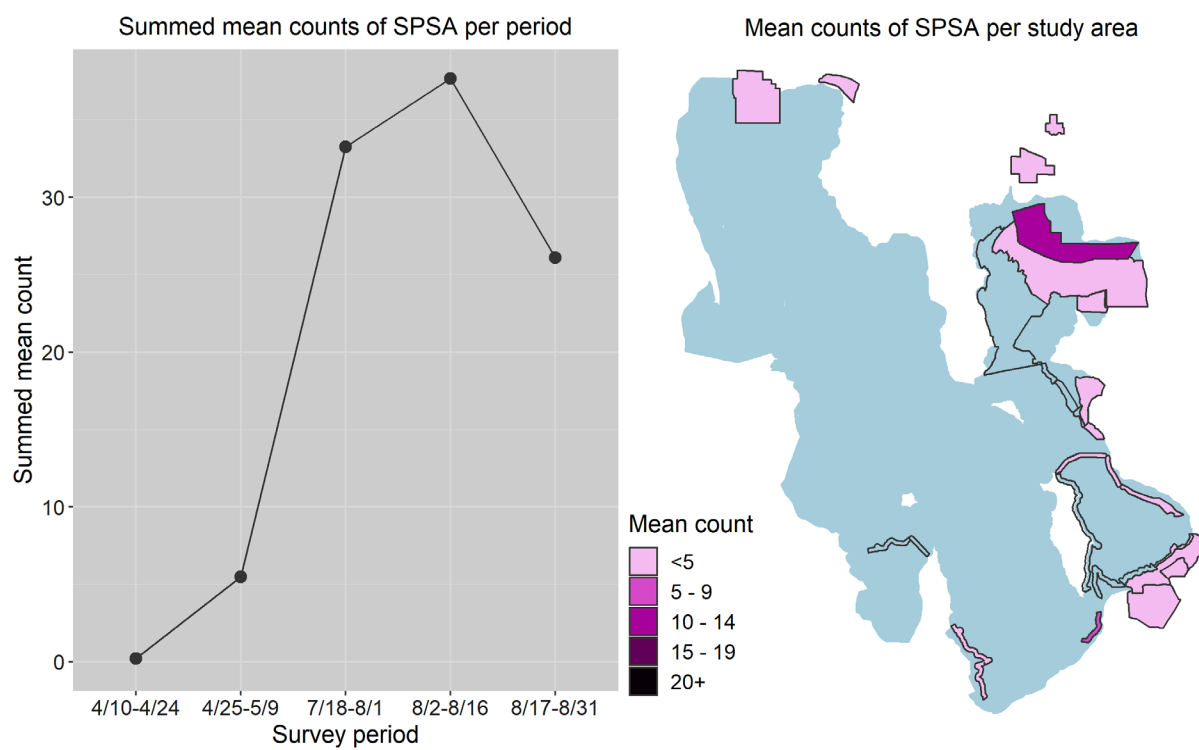
Snowy Plover

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 4	High Count 2005	Abundance Status
SNPL	586,000	16,000	341	452	880	C



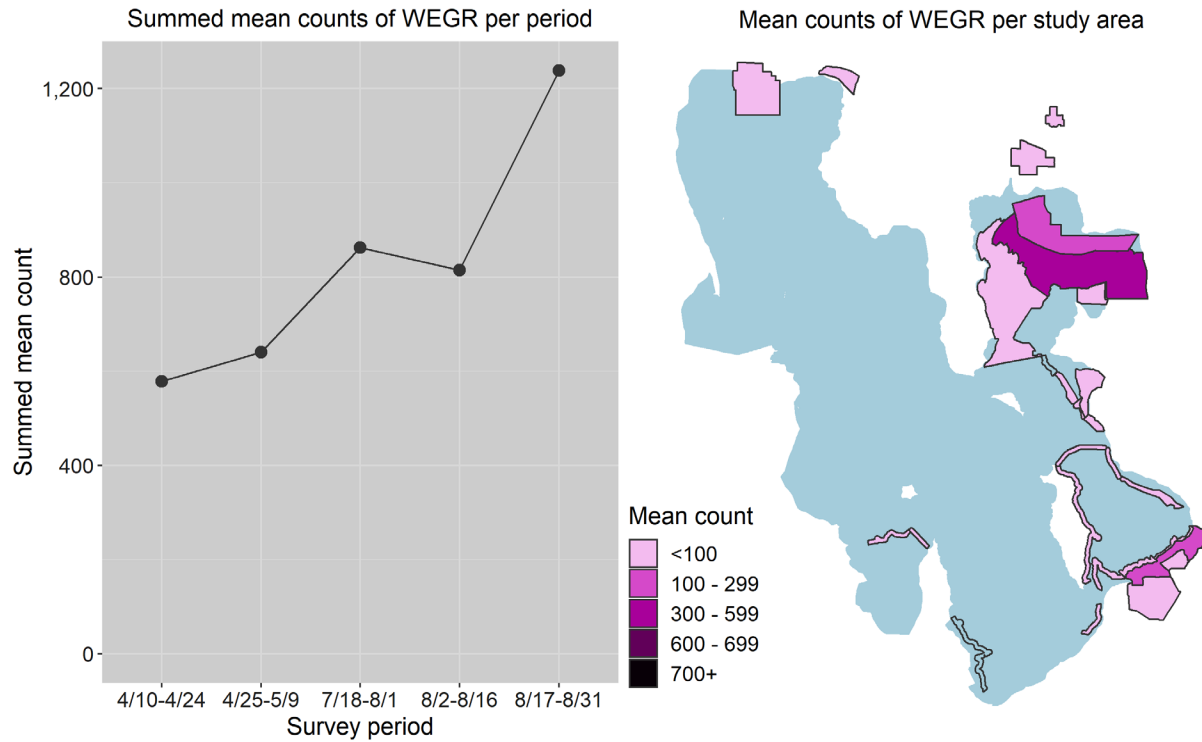
Spotted Sandpiper

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 4	High Count 2005	Abundance Status
SPSA	150,000	150,000	32	38	95	C



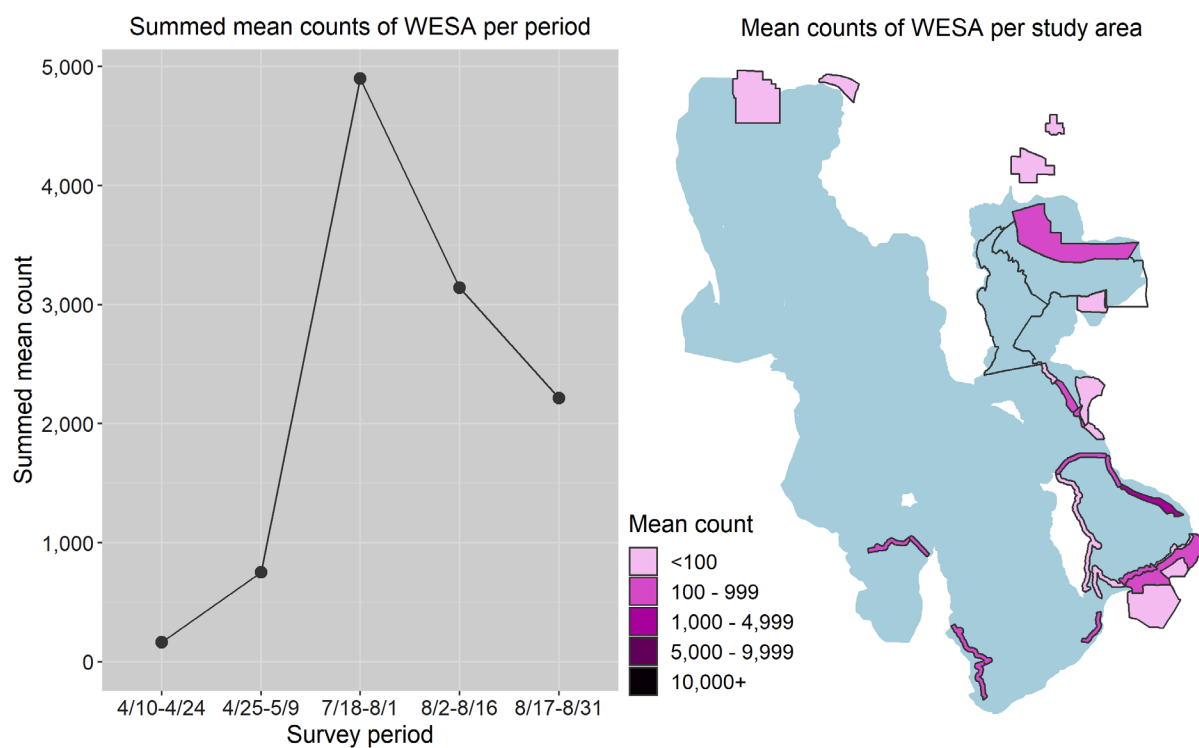
Western Grebe

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring and Fall	Peak Period 5	High Count 2004	Abundance Status
WEGR	>120,000	110,000	827	1,238	2,726	C



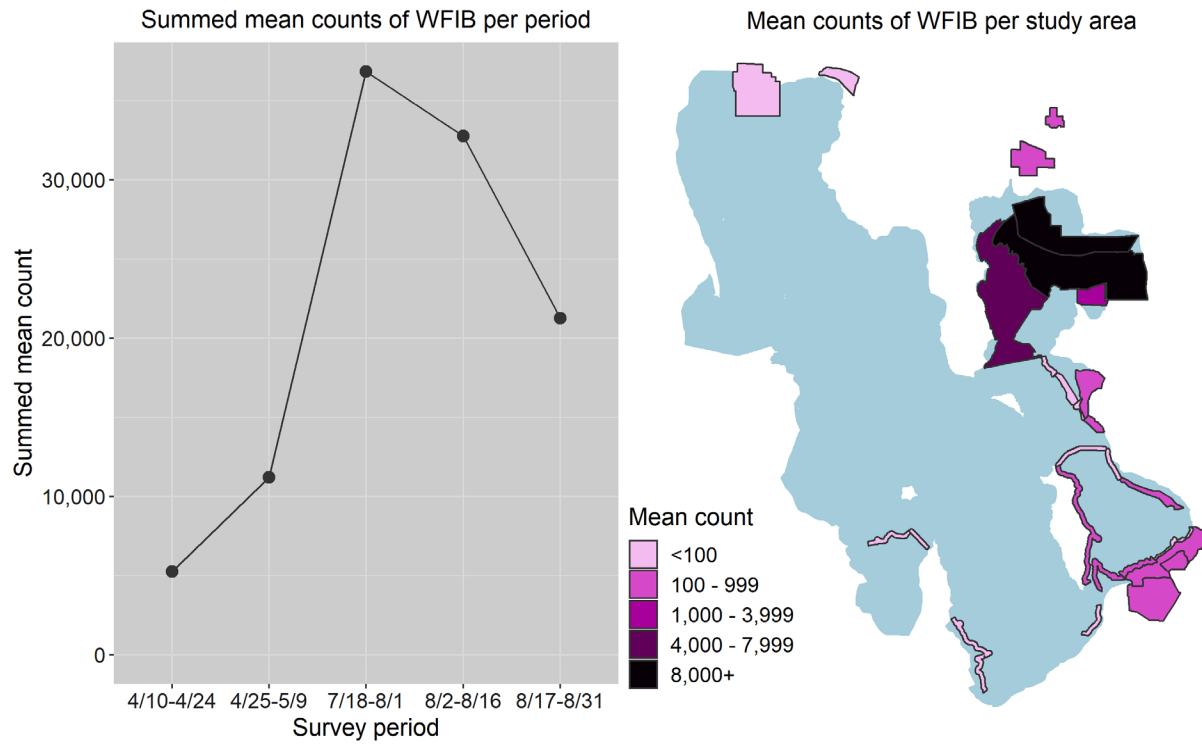
Western Sandpiper

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 3	High Count 1997	Abundance Status
WESA	3,500,000	3,500,000	3,419	4,900	26,789	C



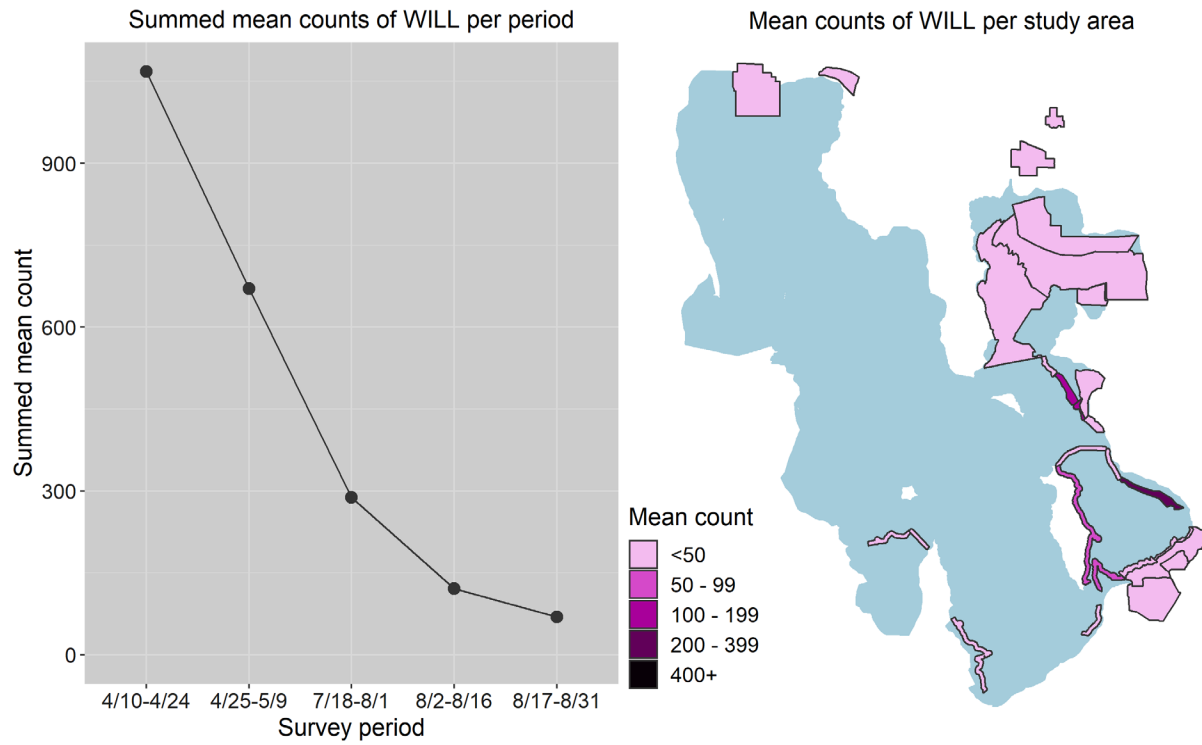
White-faced Ibis

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 3	High Count 2011	Abundance Status
WFIB	NA	>100,000 br	30,287	36,834	46,828	C



Willet

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Spring	Peak Period 1	High Count 2006	Abundance Status
WILL	250,000	250,000	869	1,068	1,619	C



Wilson's Phalarope

Code	Population Estimates		Great Salt Lake			
	Global	North America	Mean Fall	Peak Period 3	High Count 2005	Abundance Status
WIPH	1,500,000	1,500,000	60,668	113,620	631,605	C

