

Appendix E: Rice Lake NWR Biological Surveys

Biological Surveys, Rice Lake NWR

Study/Survey	Priority(10 high, 1 low)	CCP Objective	Scales	FWS R3 RCP	# Runs	# Routes
Ring-necked Duck Post-Fledgling Refuge Use	10		Refuge, State		NA	NA
Water Level Monitoring	10	2.2	Refuge		36	1
Invasive Plant Species Monitoring and Mapping	10	1.9	Refuge, State, National		NA	NA
Invasive Invertebrate Monitoring	10	1.8	Refuge, State		NA	NA
Forest Inventory Assessment	10	1.1, 1.2, 1.3, 1.4, 2.2	Refuge, State, Region		NA	NA
Common Tern Production (Mille Lacs NWR)	9	2.1, 2.2, 6.1	Refuge, State	X	12	1
Wild Rice Bed Area (GIS, georectifying aerial photos)	9	1.8, 2.2	Refuge		1	1
Fall Waterfowl Surveys	8	2.1, 2.2	Refuge, State, Mississippi Flyway	X	16	3
Wild Rice Density/Productivity	8	1.8, 2.2	Refuge, N. MN		1	4
Double Crested Cormorant Production (Mille Lacs NWR)	8	2.1, 6.2, 2.2	Refuge, State	X	1	1
Pickrelweed 10 acre Mowing Study, Phase II	8	1.7	Refuge, MN, WI, MI		NA	NA
Water Quality Monitoring	8	2.2	Refuge		16	1
Prescribed Burn Effects Monitoring	8	1.6, 2.2	Refuge		NA	NA
Fish Trapping Program and Monitoring Invasive Fish	8	1.8	Refuge, State		NA	NA
Weather Monitoring	8		Refuge, State, National		NA	NA
Pickrelweed Mowing Study, Phase I	7	1.7	Refuge, MN, WI, MI		NA	NA
National Marsh Bird Monitoring and Research Program	7	2.1, 2.2	Refuge, National	X	3	3
National American Woodcock Singing Ground Survey	7	2.2	National	X	1	3
Species Lists	7	2.1	Refuge	X	NA	NA
White Pine Restoration - Locations, Phase I	6	1.2	Refuge, State		NA	NA
Nongame Landbird Point Counts, Forest	6	2.1, 2.2	Refuge, National	X	NA	NA
Waterfowl Breeding Pair Survey	5	2.1, 2.2	Refuge	X	1	3
Waterfowl Brood Survey	5	2.1, 2.2	Refuge	X	NA	NA
Bald Eagle Nest/Productivity Survey	4	2.1, 2.2	Refuge, State, National	X	2	3

Biological Surveys, Rice Lake NWR

Study/Survey	Priority(10 high, 1 low)	CCP Objective	Scales	FWS R3 RCP	# Runs	# Routes
Beaver Lodge/Muskrat Hut Survey	4	2.2	Refuge		1	3
Christmas Bird Count	4	2.1, 2.2	Refuge, State, National	X	1	4
North American Amphibian Monitoring Program	4	2.2	Refuge, State		3	1
Loon Productivity Monitoring (on refuge)	3	2.1, 2.2	Refuge	X	NA	NA
Wood Duck Box Program	3	2.1, 2.2	Refuge	X	1	1
Bluebird Box Program	3	2.2	Refuge		3	1
Raptor/Waterbird/Shorebird Survey (at same time as Waterfowl Surveys)	2	2.1, 2.2	Refuge	X	17	3
Fish Population Survey	2	1.8, 2.2	Refuge		1	1
Chronic Wasting Disease Monitoring	1	2.2	Refuge, State, Region		NA	NA
Statewide Loon Survey	1	2.2	State	X	1	4
Ruffed Grouse Drumming	1	2.2	Refuge		1	3
Sharptail Grouse Lek Survey (MNDNR does for us at Sandstone)	1	2.2	Refuge, State		1	1
Refuge American Woodcock Singing Ground Survey	1	2.1, 2.2	Refuge	X	1	3
Midwinter Waterfowl Survey	1	2.1, 2.2	Refuge, Region, National	X	1	1
This list was developed based on Fiscal Year 2007 funding and grant opportunities; and is expected to change before the lifetime of this plan expires due to changes in technology, future threats, funding allocation and grant opportunities.						