

**Conservation Estate Portfolio for the
Black-billed Cuckoo
(*Coccyzus erythrophthalmus*)**

**Bird Conservation Region 23
(Prairie Hardwood Transition)**



http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Black-billed_Cuckoo.html

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Preface

Mapped patterns in the distribution and abundance of rare or focal species can be useful in identifying priority areas for conservation. We have modeled and mapped rare bird abundance in the upper midwestern United States for more than a dozen species of conservation concern. Our work has focused on the Prairie Hardwood Transition (Bird Conservation Region 23). This portfolio describes the conservation context of one species in the Prairie Hardwood Transition. We outlined areas of peak predicted abundance relative to federal, tribal, and state managed lands. This juxtaposition of predicted relative abundance and land management authorities is the conservation estate for this focal species. Identifying these land management authorities relative to areas in which the species is most abundant may help to focus conservation resources in those areas in which they may do the most good.

Data References

Major Cities depicted using data acquired from the National Atlas of the United States web site (<http://nationalatlas.gov/mld/citiesx.html>). Major cities were determined to be those that had a population in 2000 of greater than 5,000 persons.

Major Roads depicted using data acquired from the National Atlas of the United States web site (<http://nationalatlas.gov/mld/roadtrl.html>). Roads were determined to be Major if they were classified as *Principal Highway* or *Limited Access Highway* according to the data field "Feature".

States data were created by Geographic Data Technology, Inc. This data was published by Environmental Systems Research Institute (ESRI) and made available for distribution.

Counties data were acquired from the National Atlas of the United States web site (<http://www.nationalatlas.gov/mld/countyp.html>).

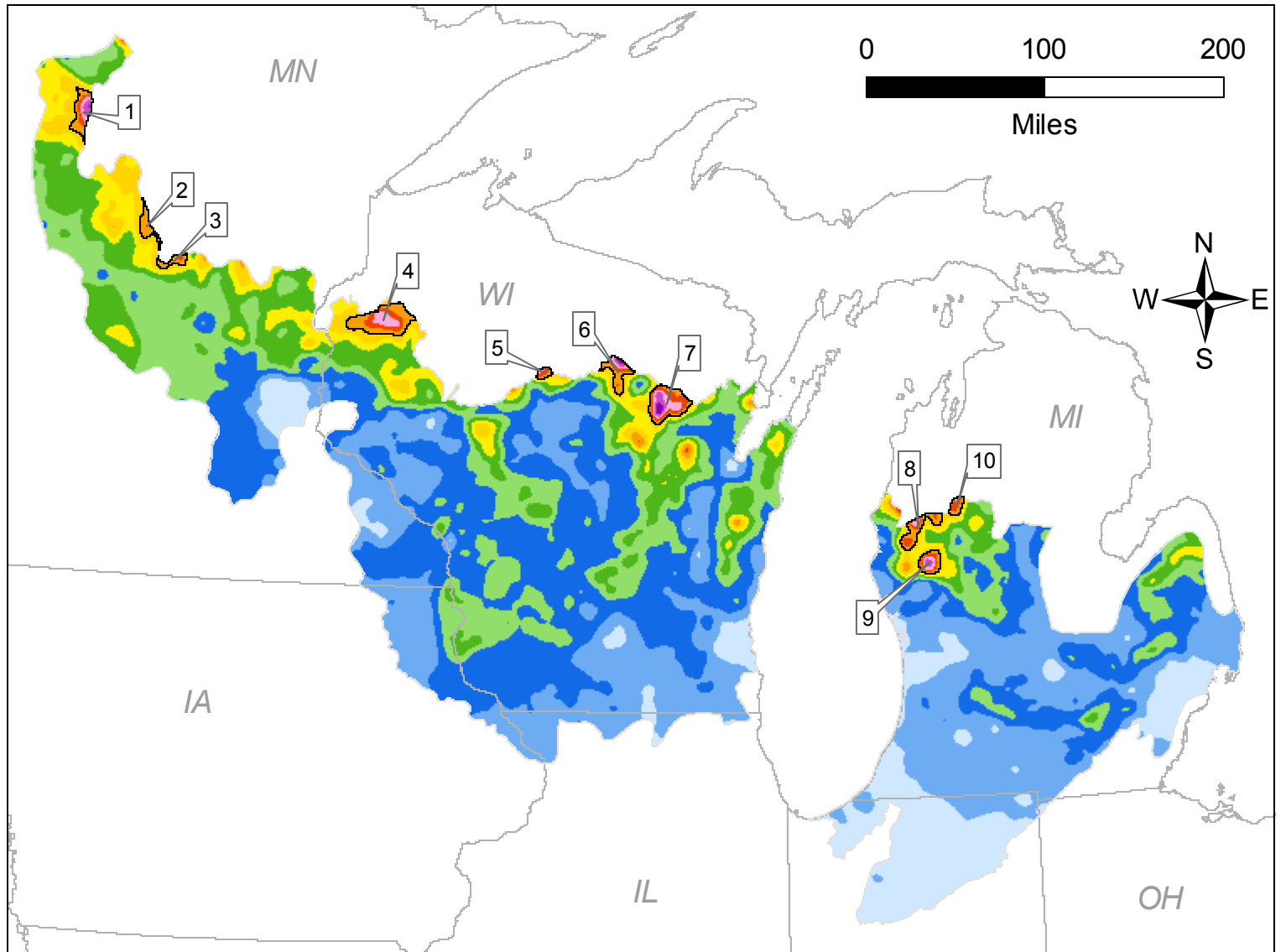
Federal and State lands depicted using Protected Areas Database, version 4: (<http://www.consbio.org/cbi/projects/PAD/index.htm>). Federal and State lands were identified based upon the data field "Owner".




Tribal lands depicted using data acquired from the National Atlas of the United States web site (<http://www.nationalatlas.gov/mld/indlanp.html>).

Methodology

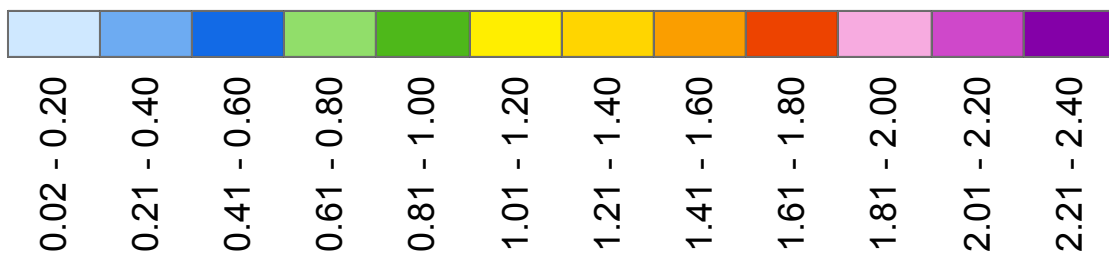
For detailed methodology on avian abundance modeling, see: http://www.umesc.er.usgs.gov/terrestrial/migratory_birds/bird_conservation_methods.html

Predicted Relative Abundance and 10-Highest Peaks of Predicted Relative Abundance for the Black-Billed Cuckoo



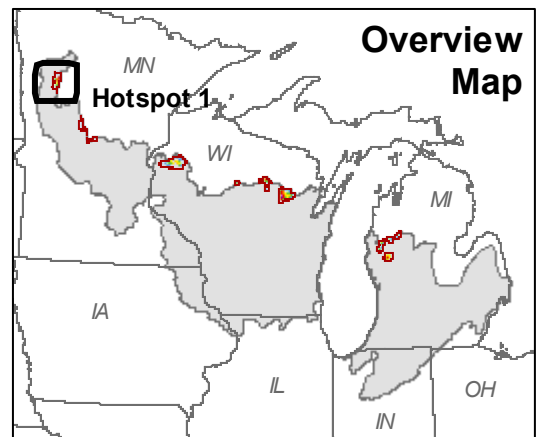
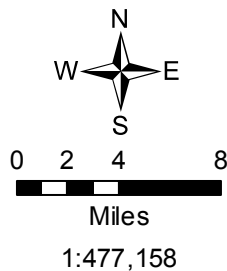
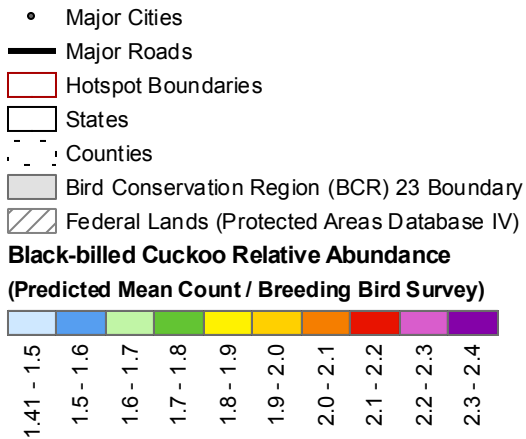
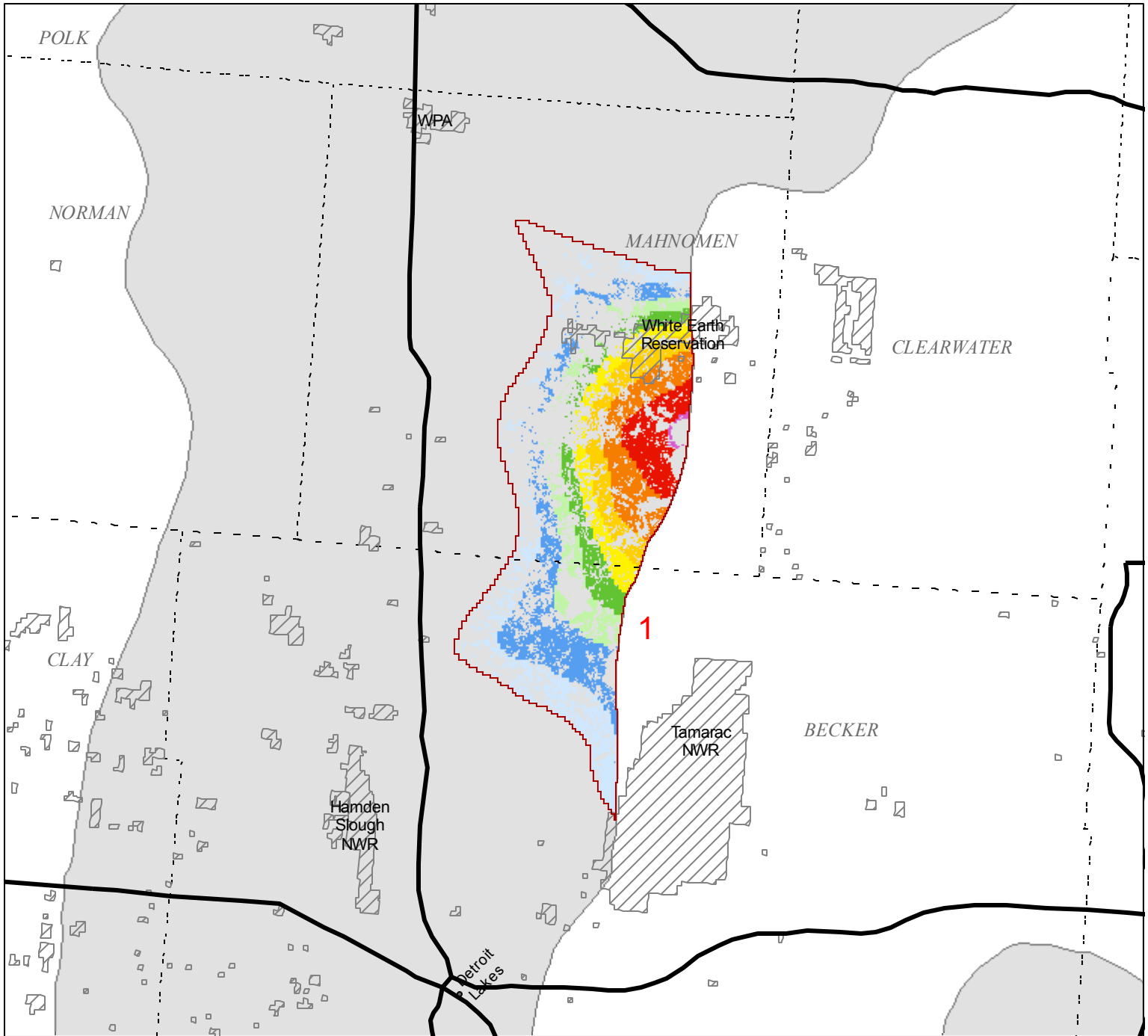
-  Top 10 Hotspots
-  States
-  Bird Conservation Region (BCR) 23 Boundary

Black-billed Cuckoo Relative Abundance
(Predicted Mean Count / Breeding Bird Survey)



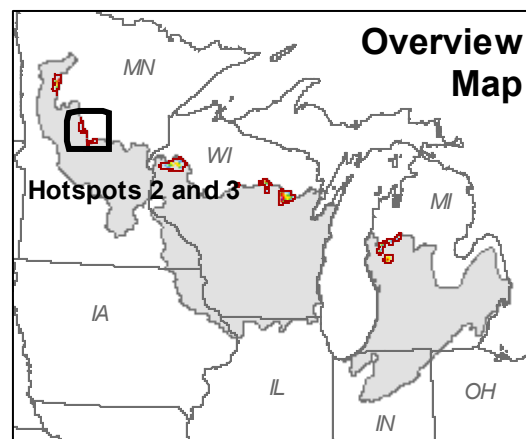
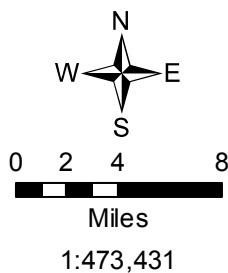
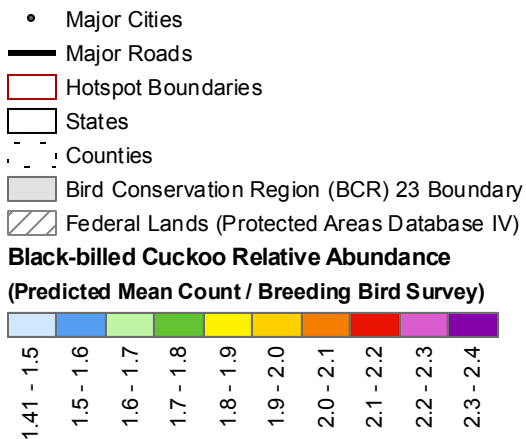
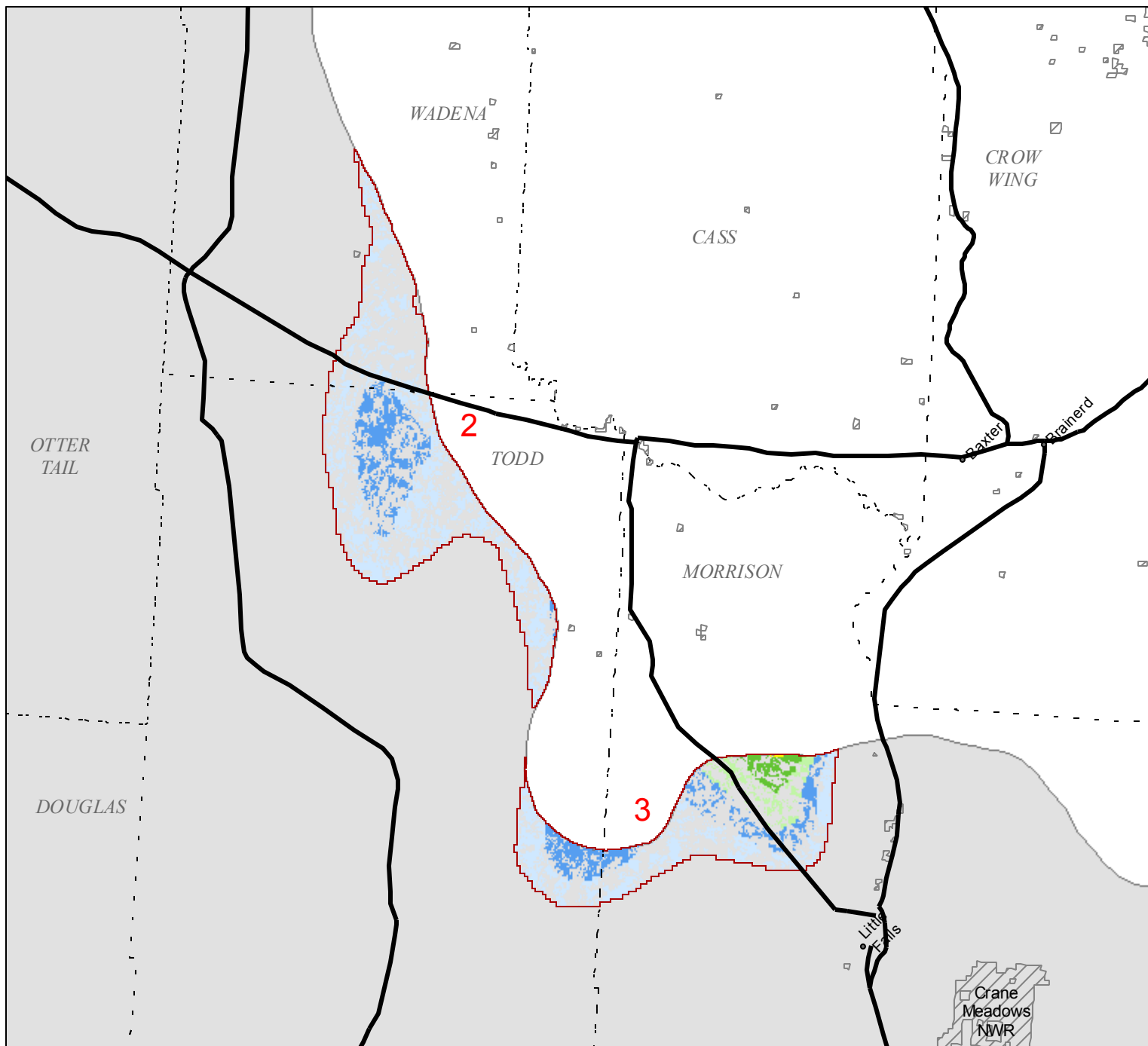
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with Federal Lands

Hotspot 1



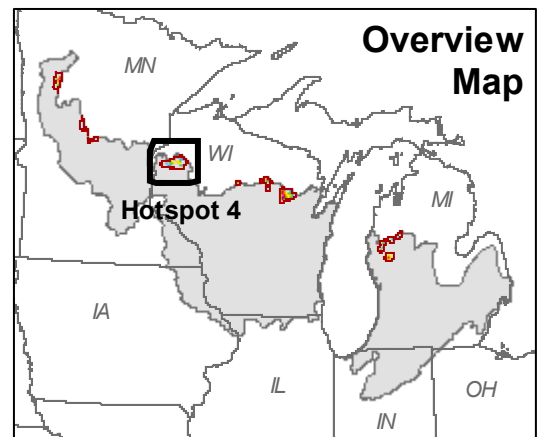
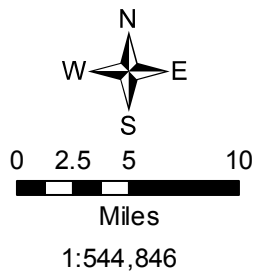
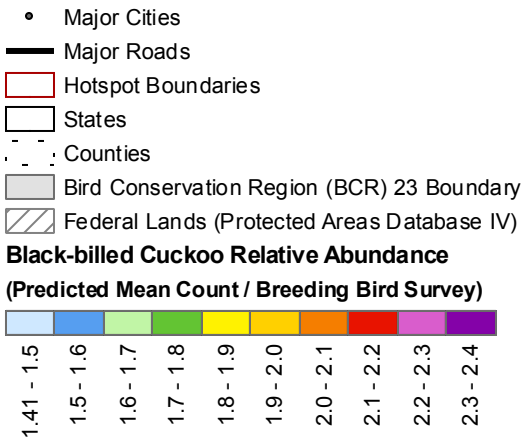
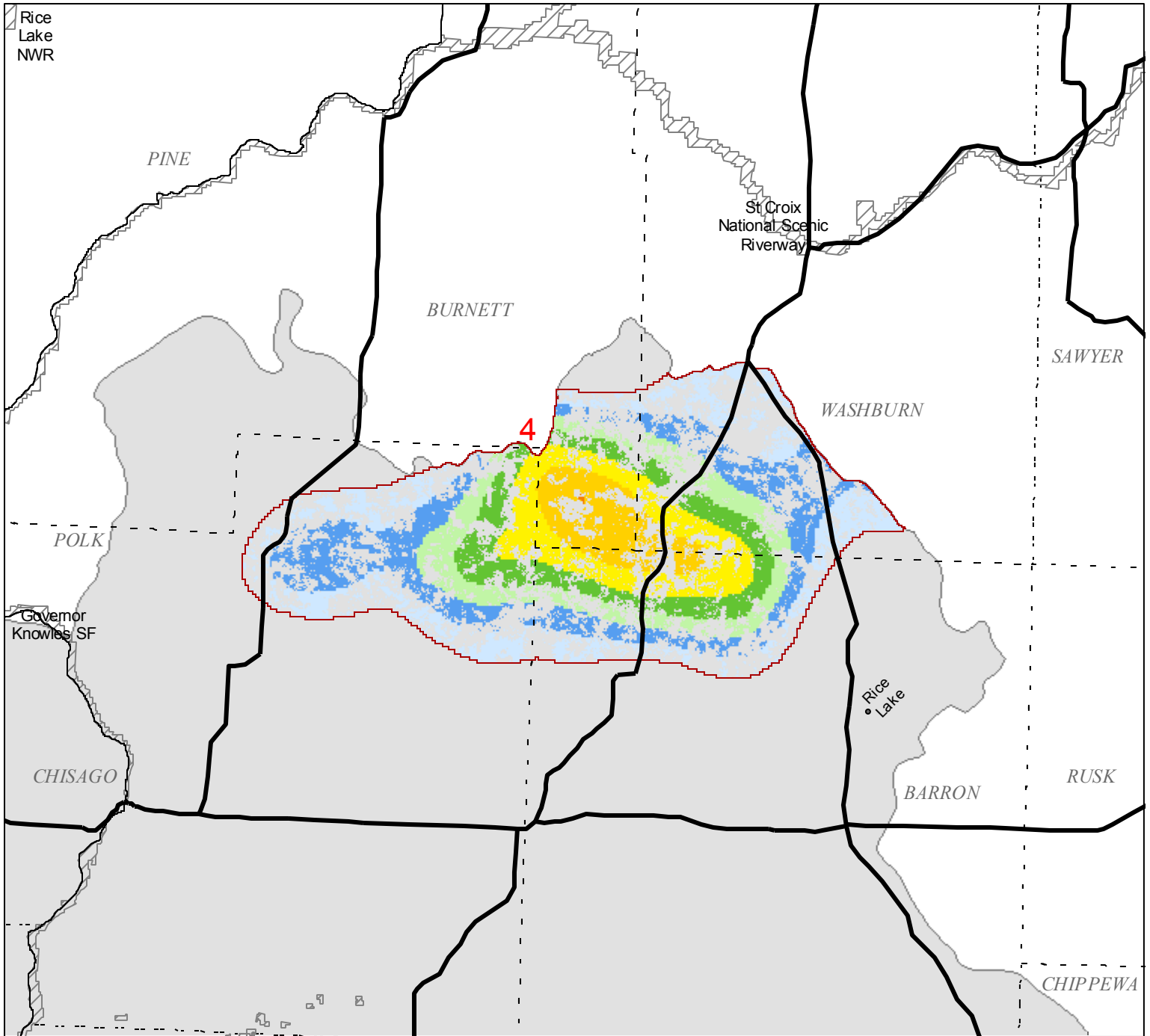
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with Federal Lands

Hotspots 2 and 3



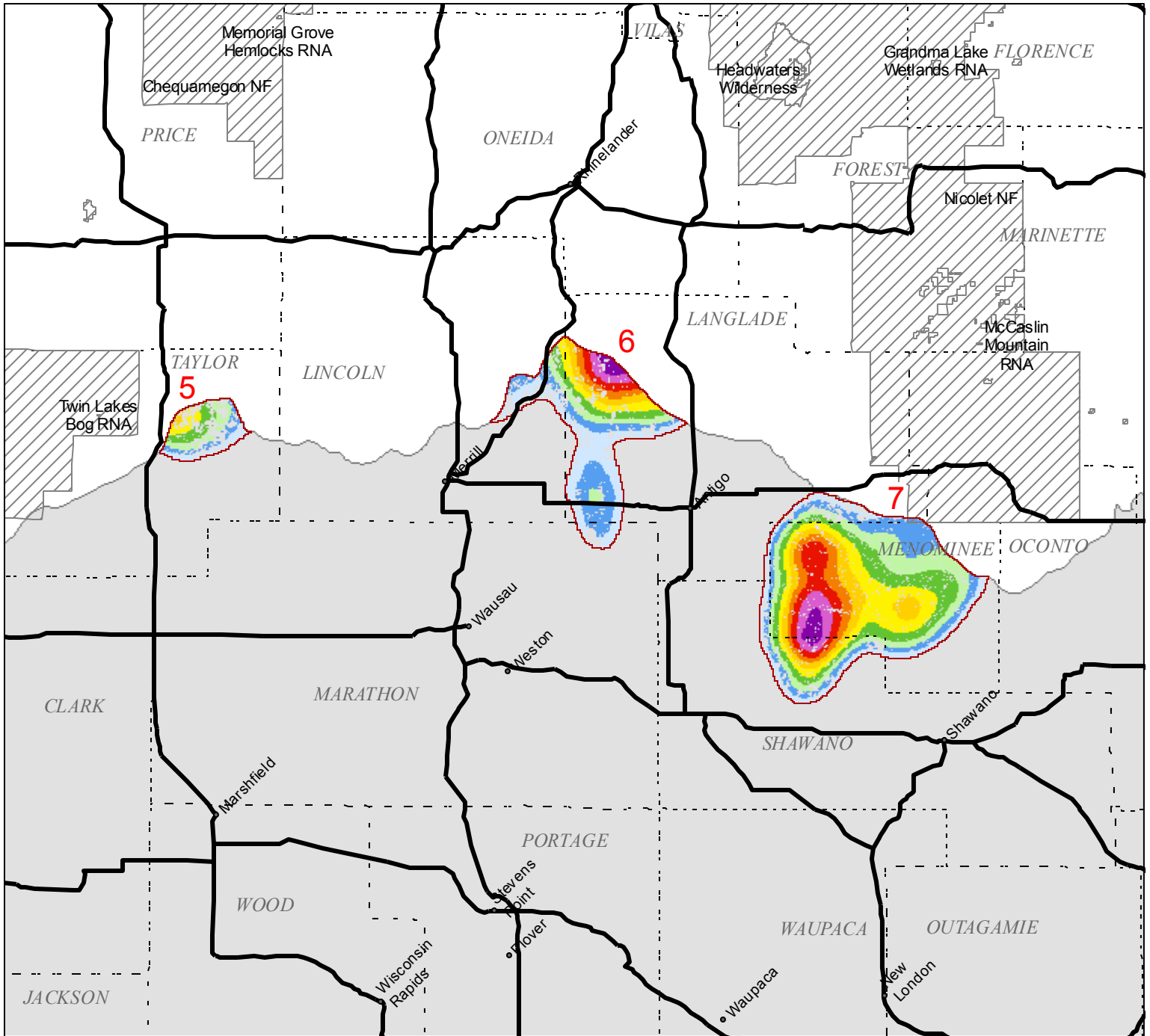
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlayed with Federal Lands

Hotspot 4



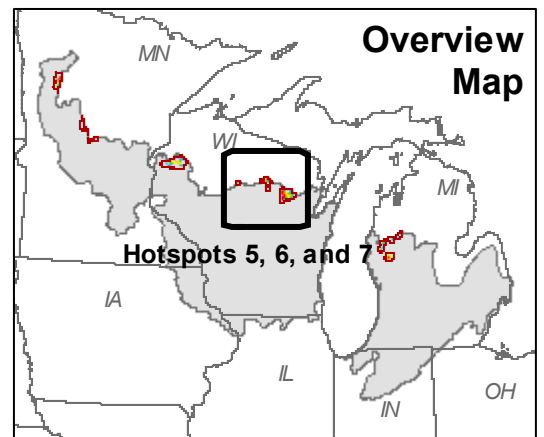
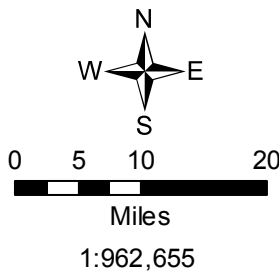
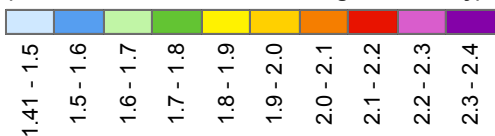
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with Federal Lands

Hotspots 5, 6, and 7



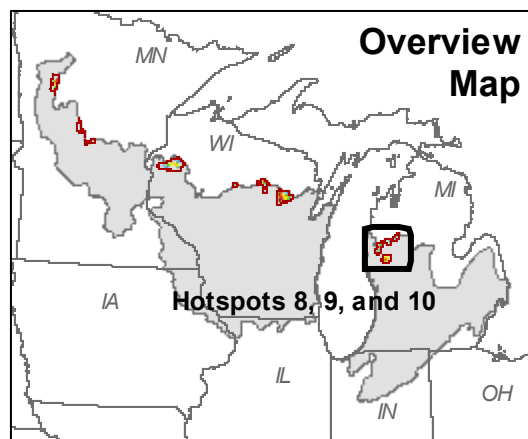
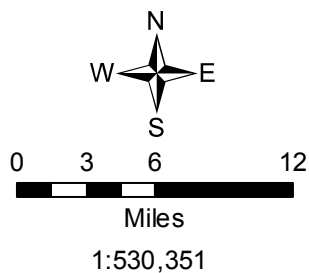
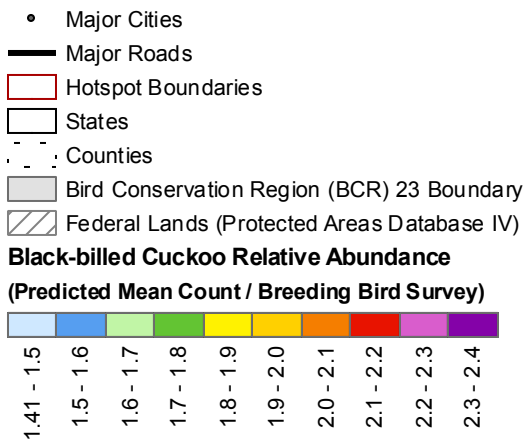
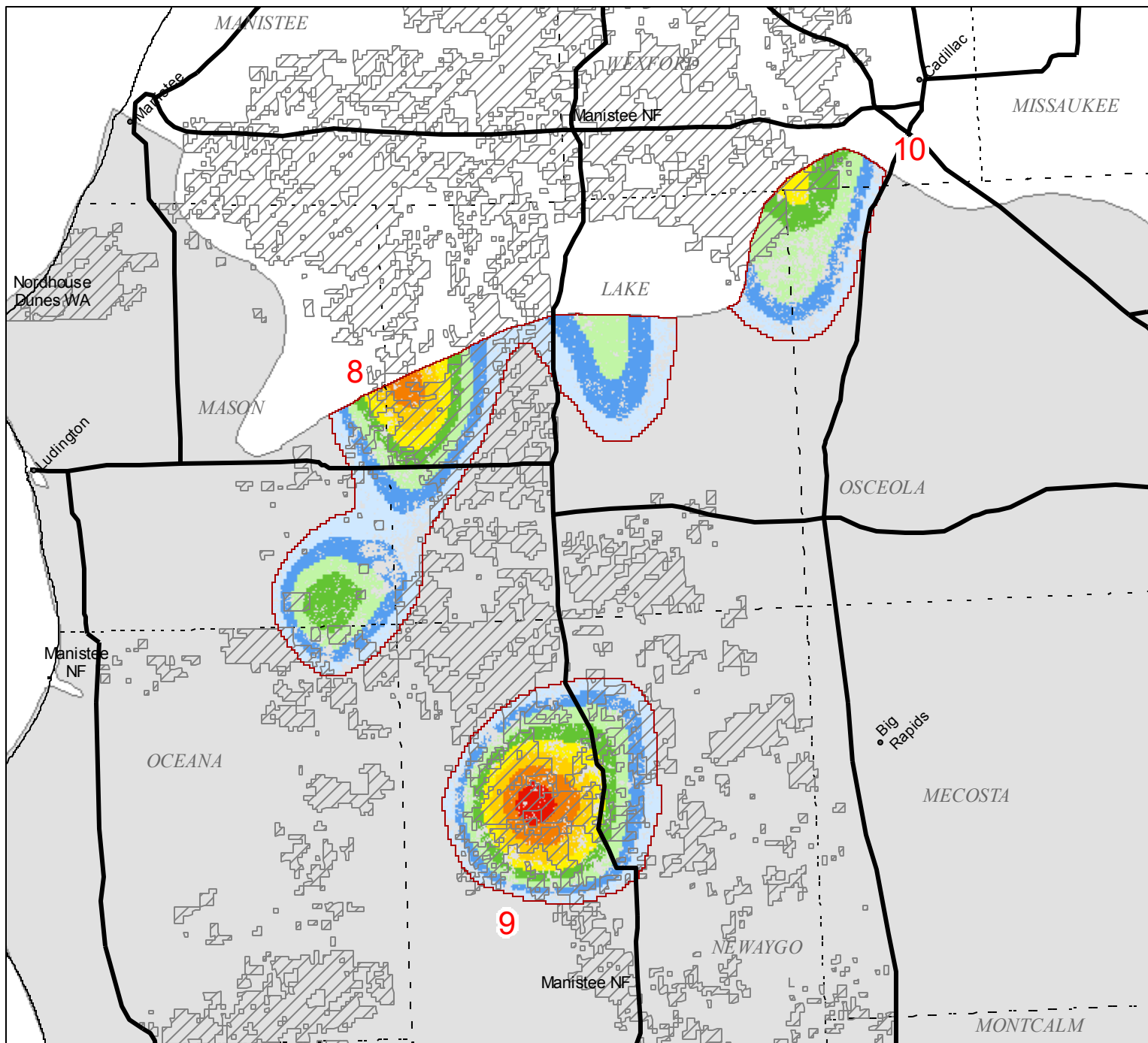
- Major Cities
- Major Roads
- ▭ Hotspot Boundaries
- ▭ States
- ▭ Counties
- ▭ Bird Conservation Region (BCR) 23 Boundary
- ▨ Federal Lands (Protected Areas Database IV)

Black-billed Cuckoo Relative Abundance (Predicted Mean Count / Breeding Bird Survey)



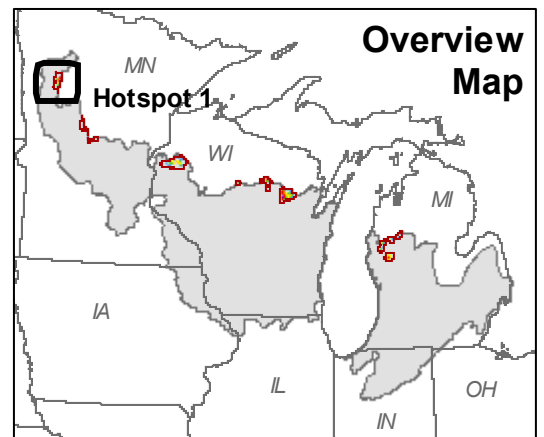
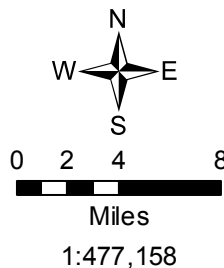
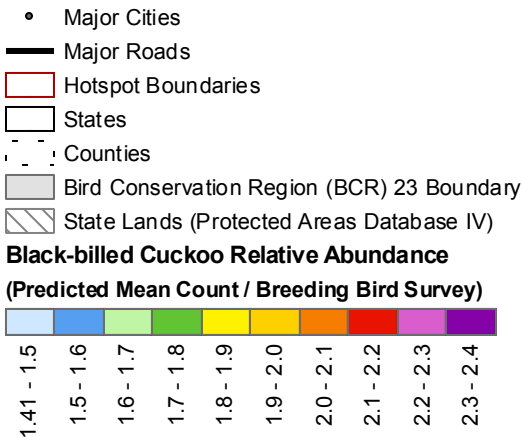
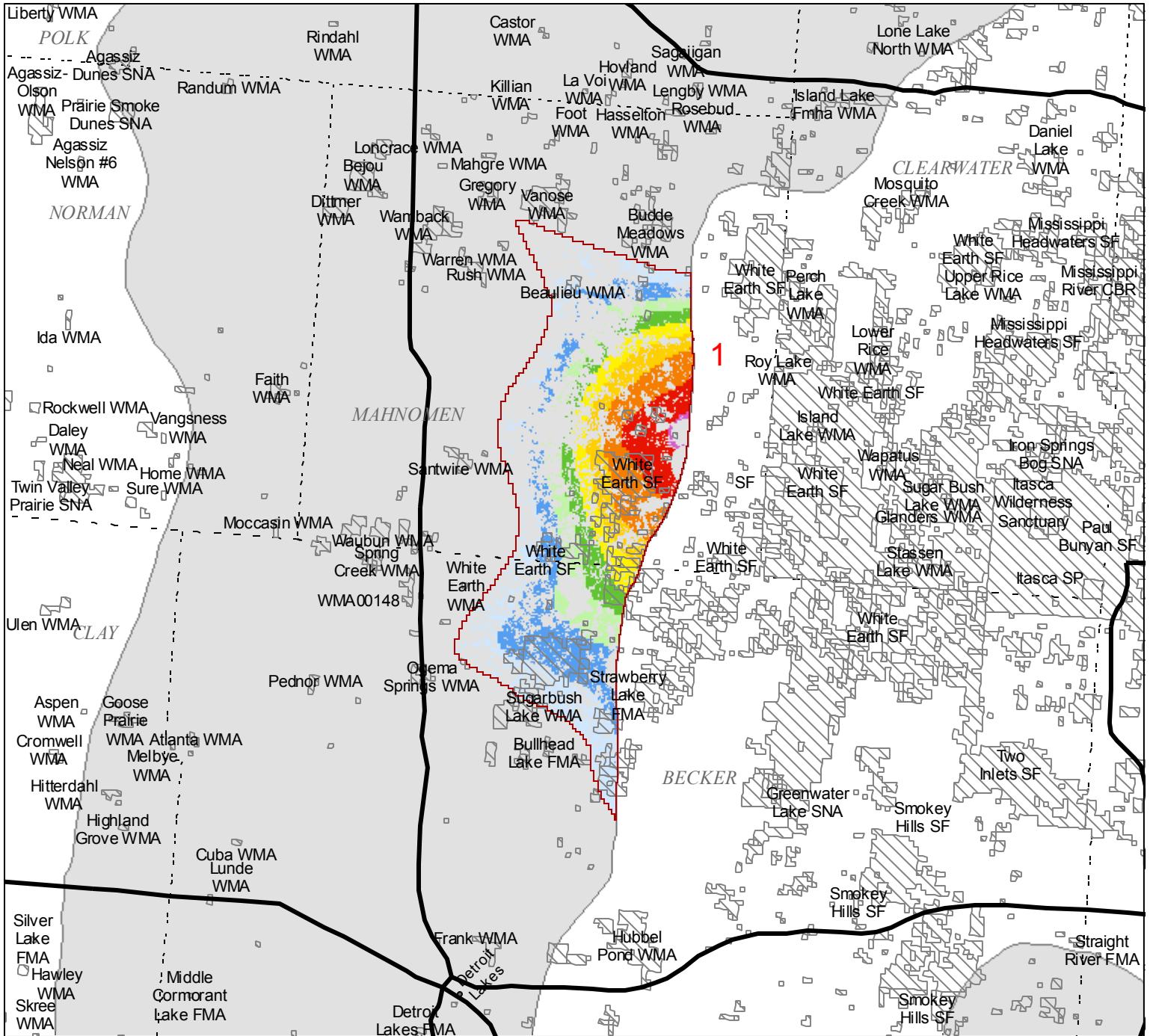
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with Federal Lands

Hotspots 8, 9, and 10



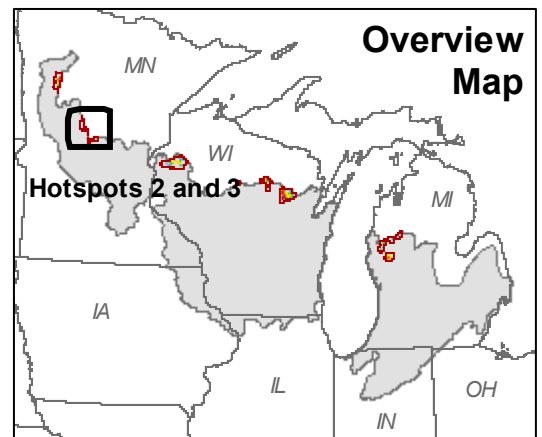
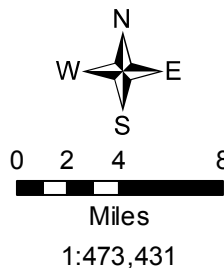
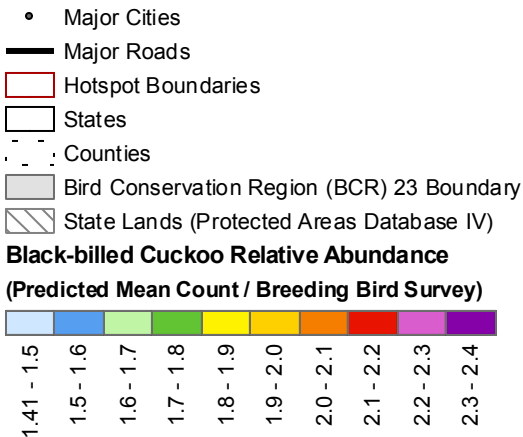
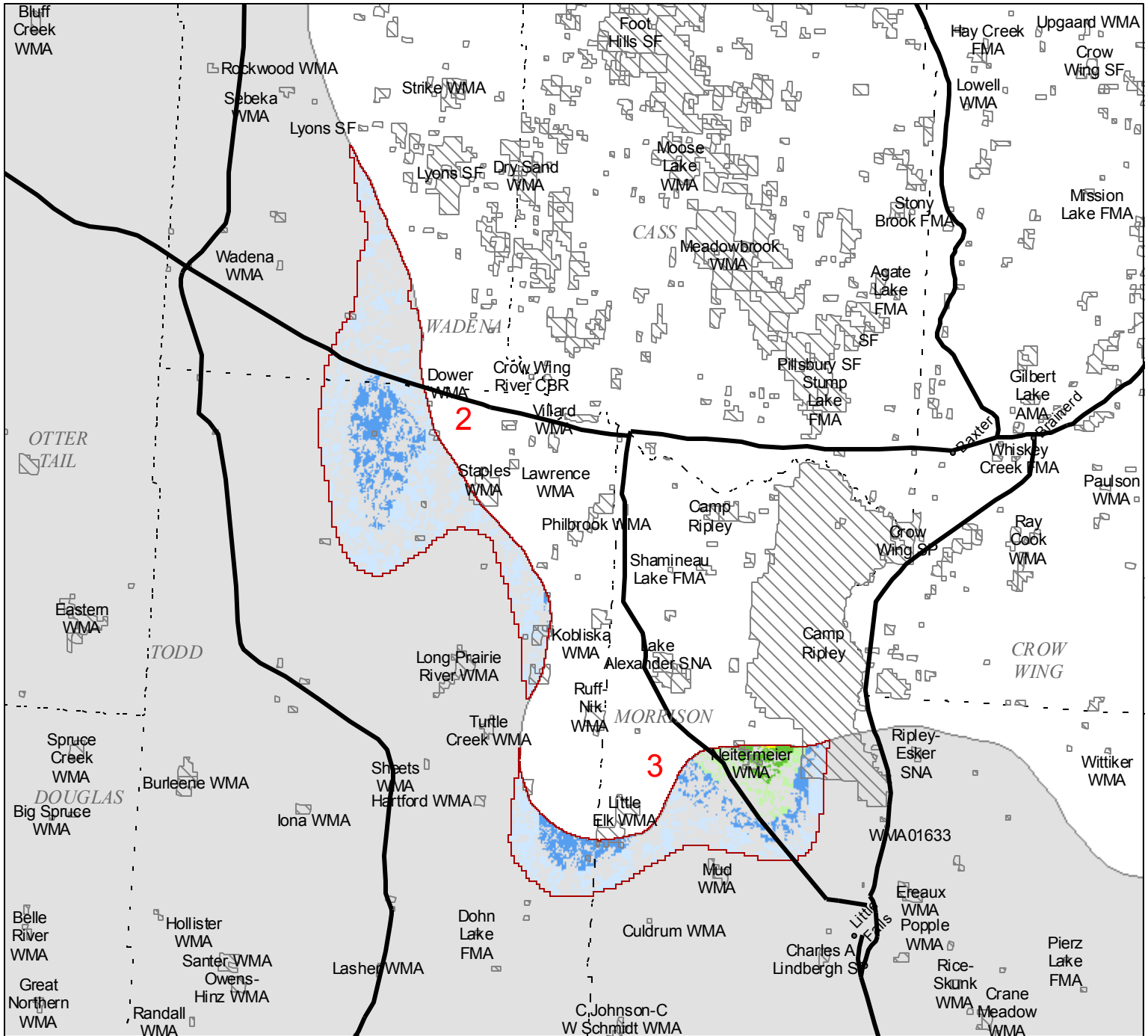
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlayed with State Lands

Hotspot 1



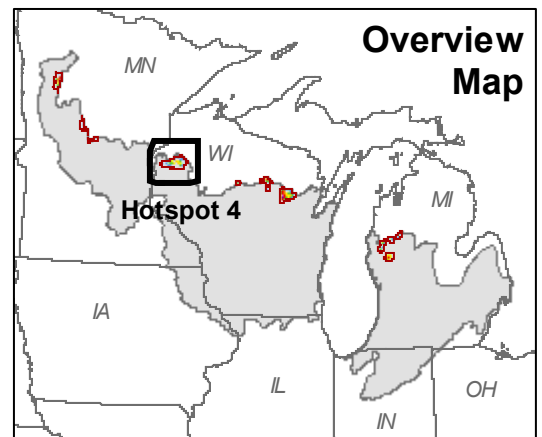
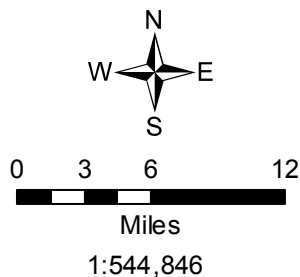
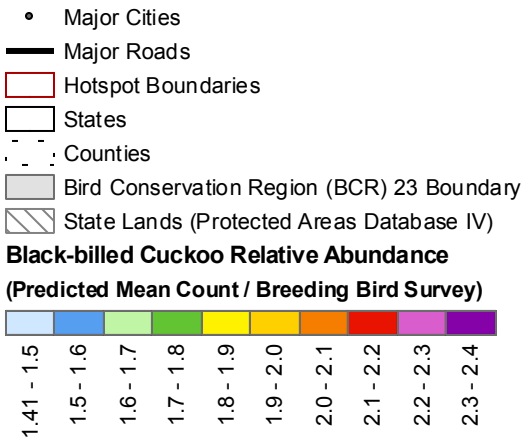
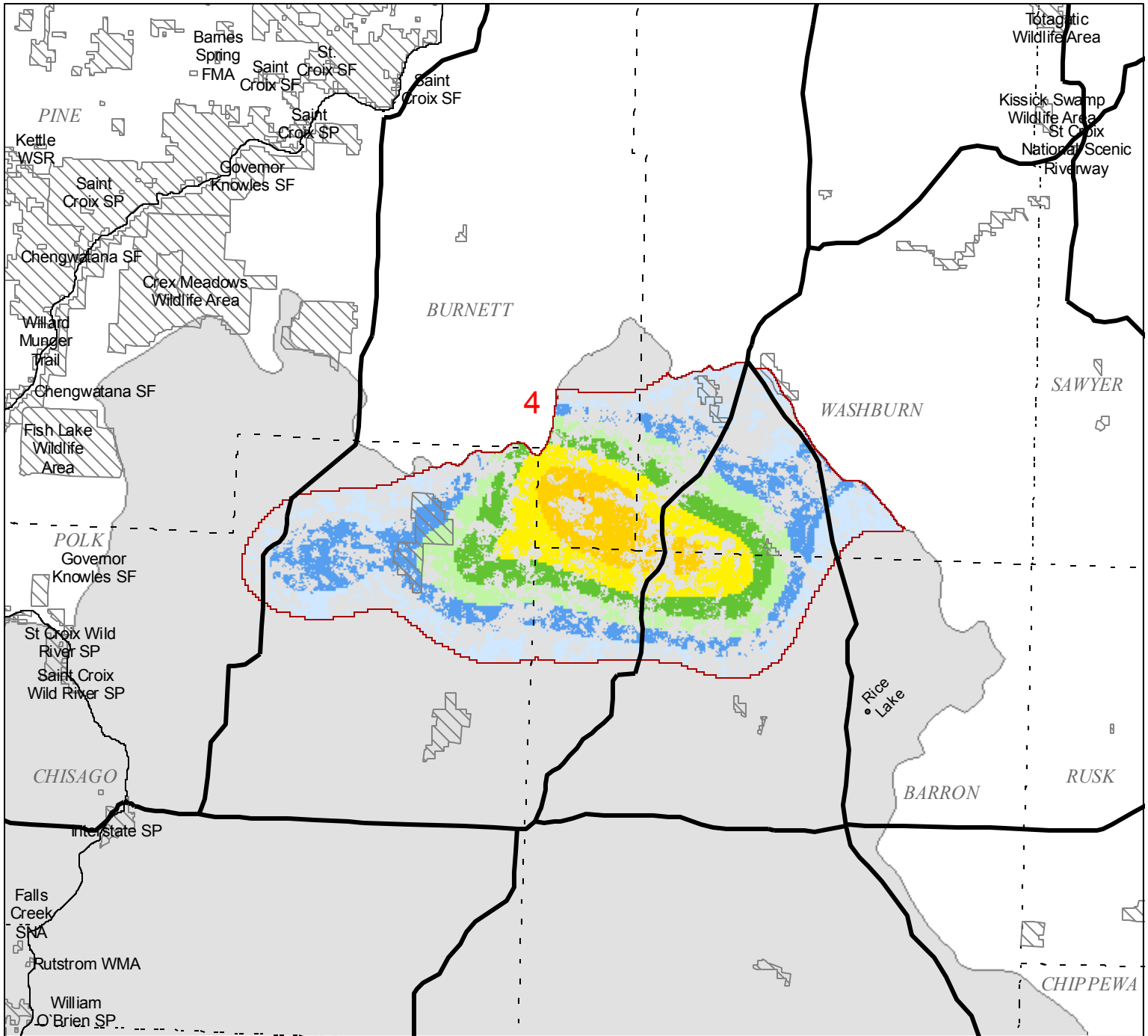
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with State Lands

Hotspots 2 and 3



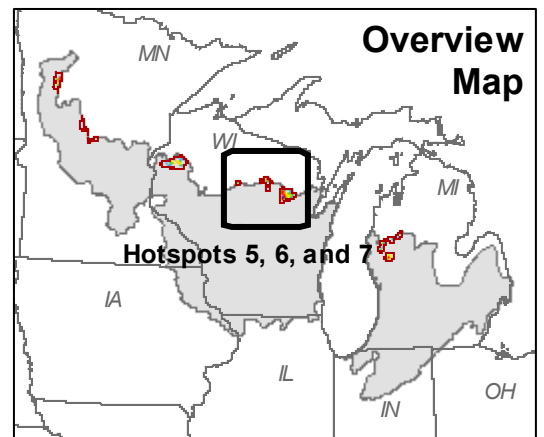
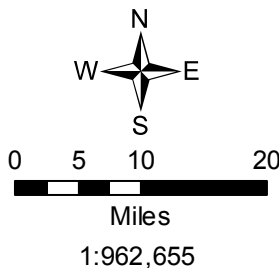
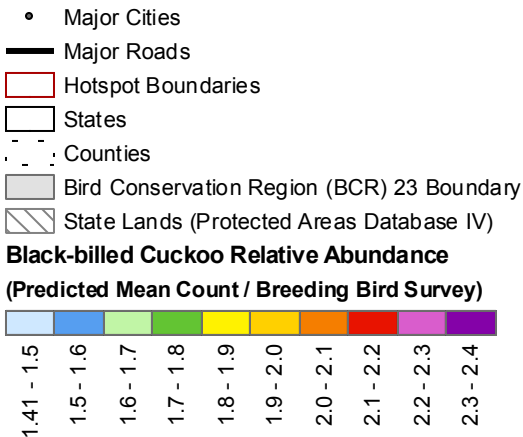
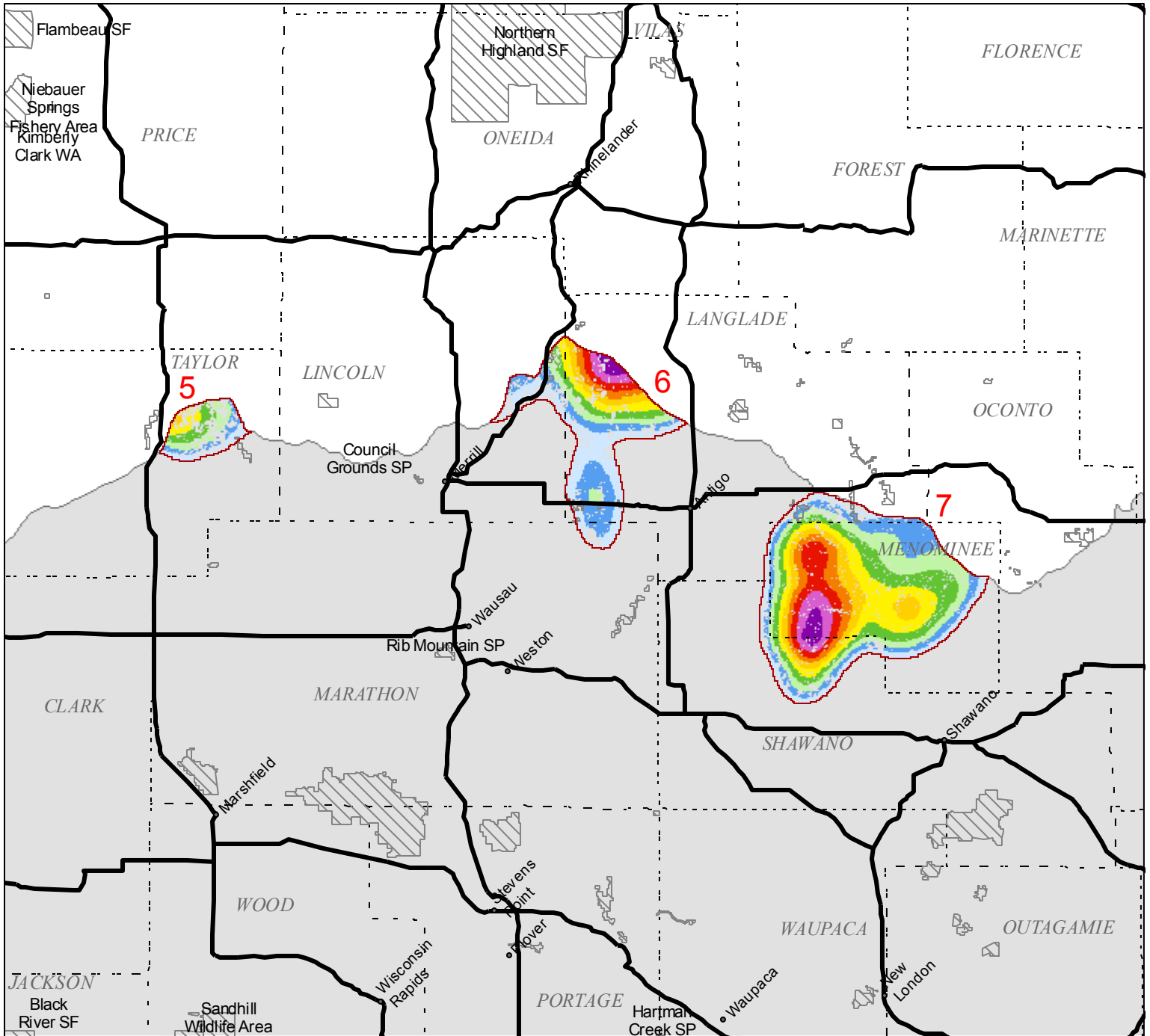
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with State Lands

Hotspot 4



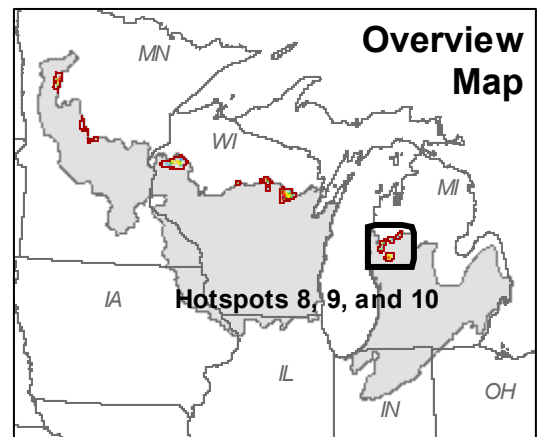
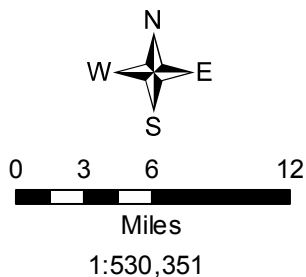
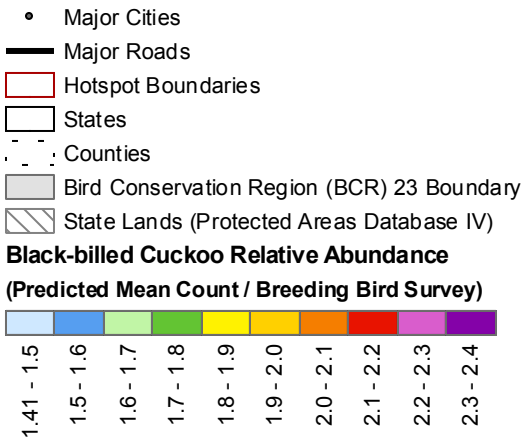
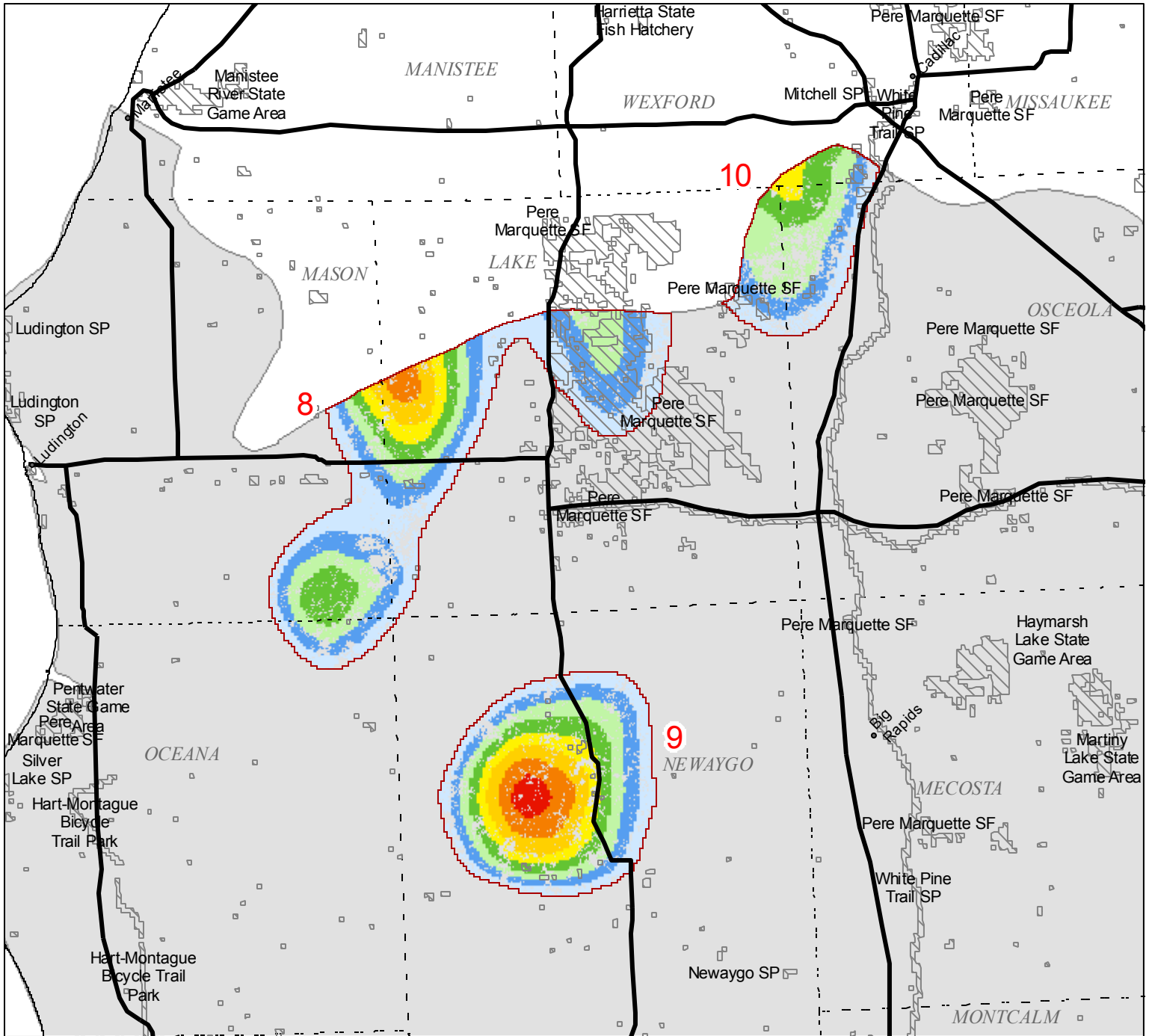
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with State Lands

Hotspots 5, 6, and 7



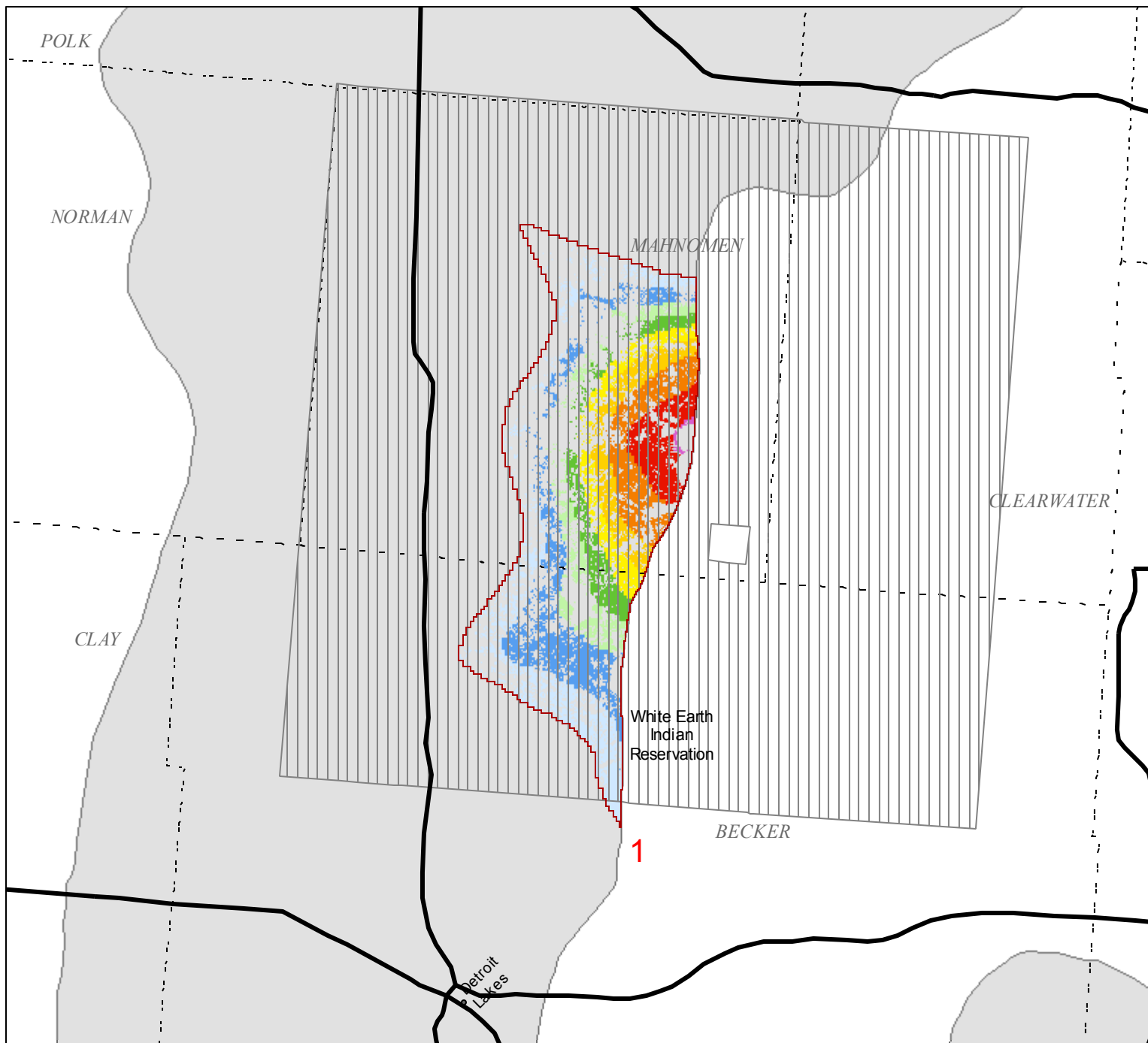
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with State Lands

Hotspots 8, 9, and 10



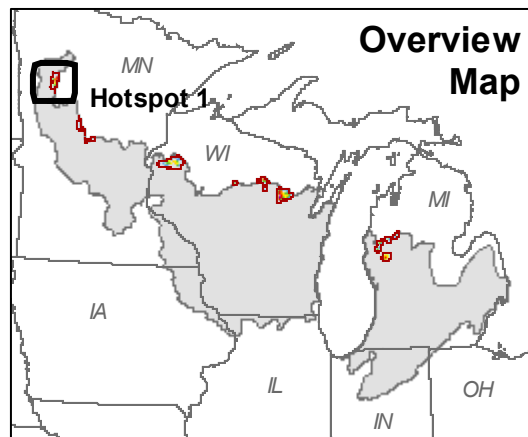
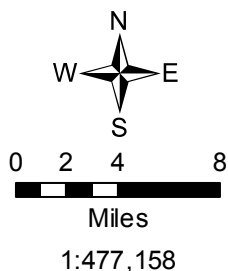
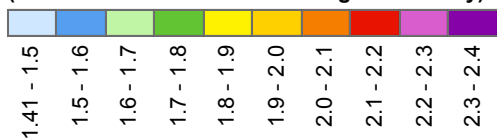
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with Tribal Lands

Hotspot 1



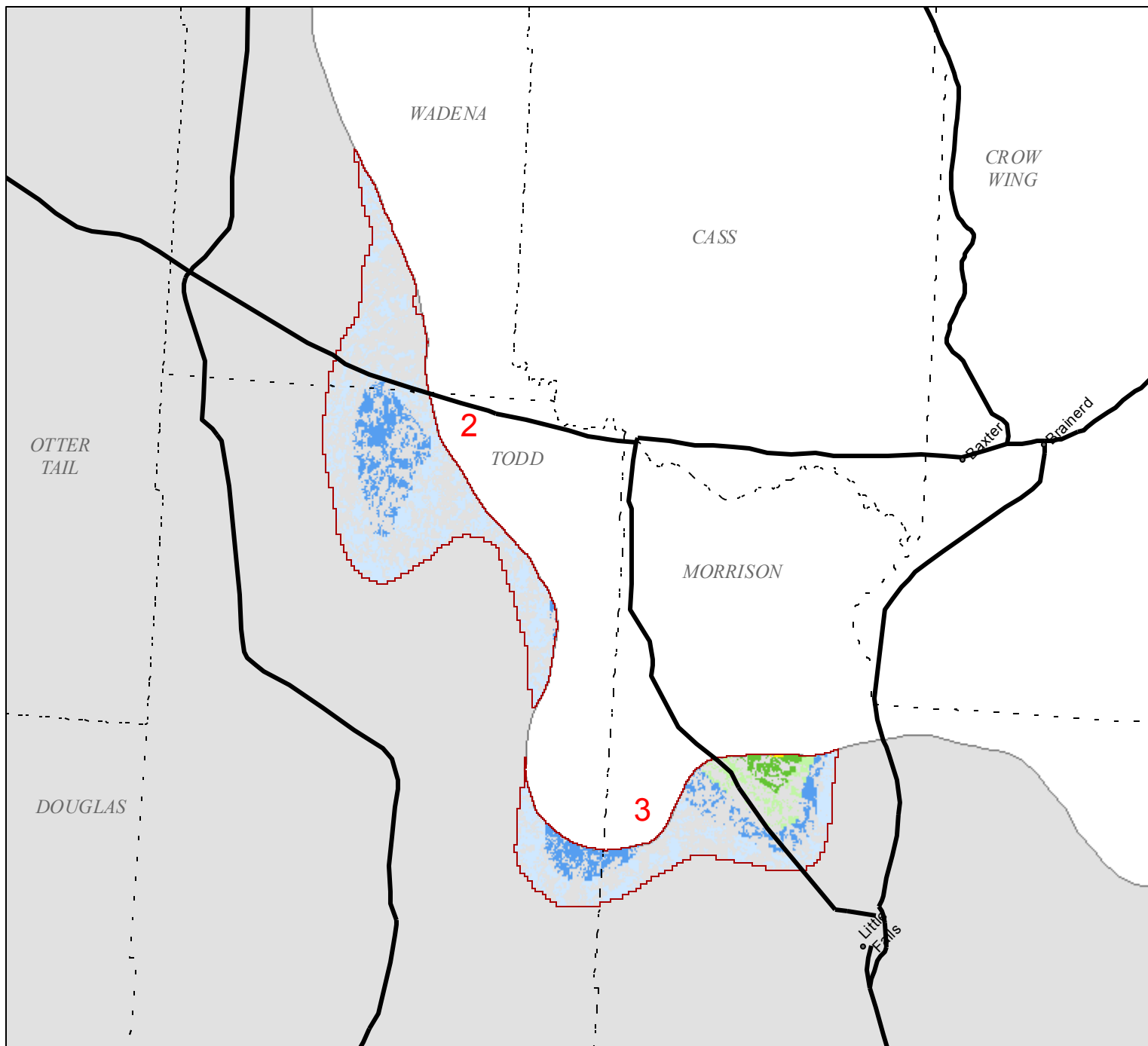
- Major Cities
- Major Roads
- ▭ Hotspot Boundaries
- ▭ States
- - - Counties
- ▭ Bird Conservation Region (BCR) 23 Boundary
- ▭ Tribal Lands

Black-billed Cuckoo Relative Abundance
(Predicted Mean Count / Breeding Bird Survey)



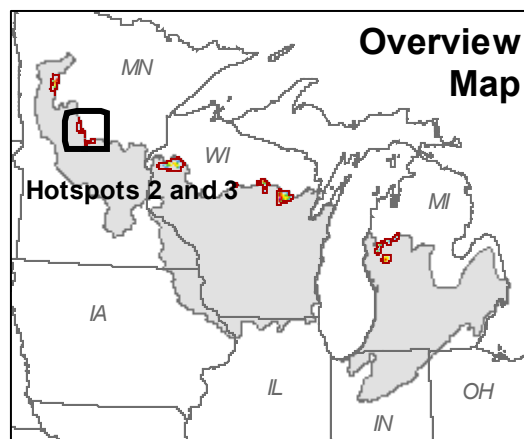
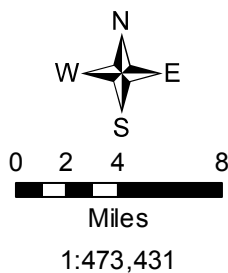
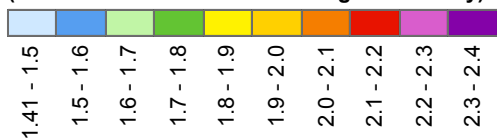
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with Tribal Lands

Hotspots 2 and 3



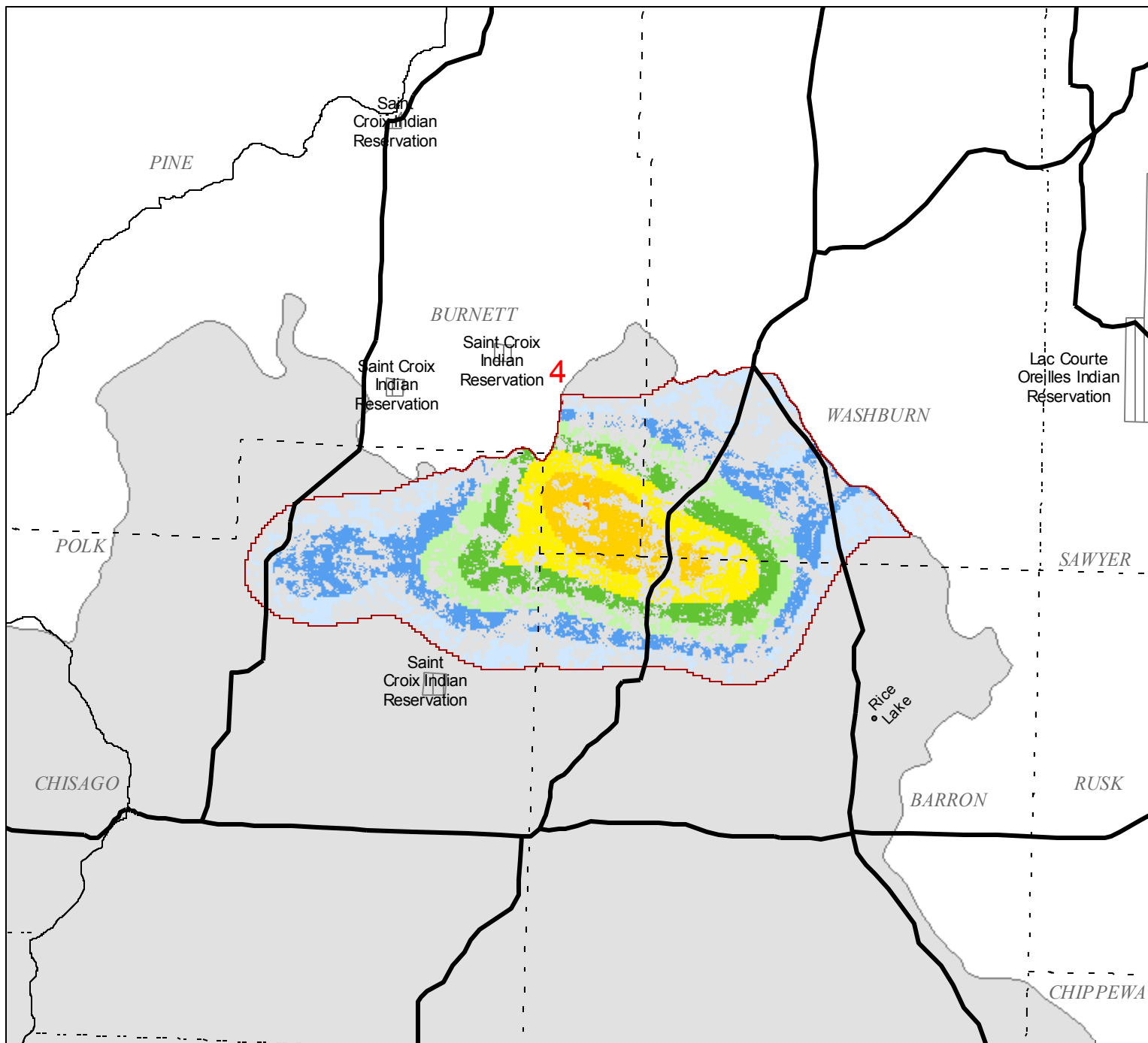
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Black-billed Cuckoo Relative Abundance (Predicted Mean Count / Breeding Bird Survey)



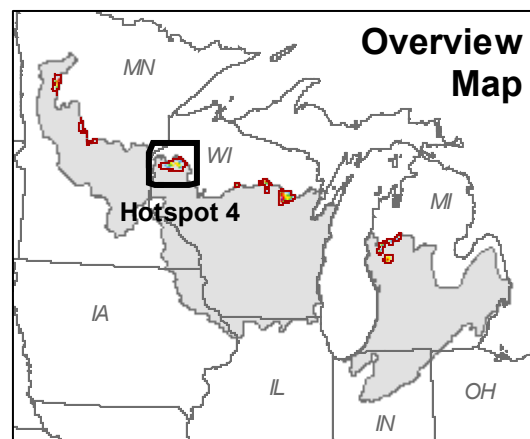
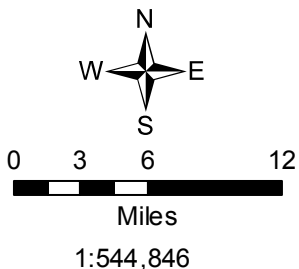
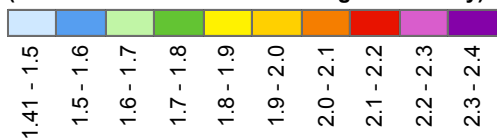
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with Tribal Lands

Hotspot 4



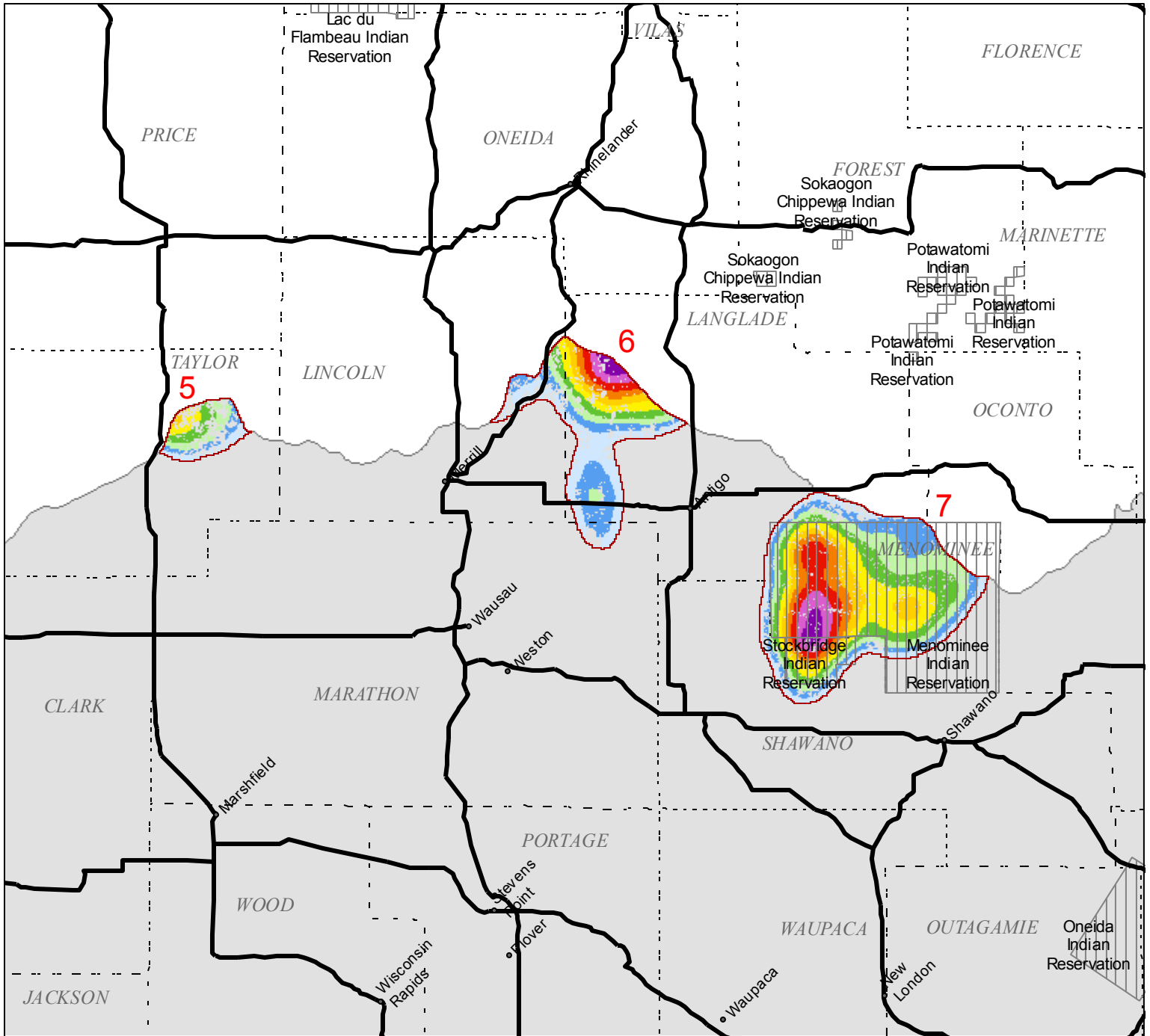
- Major Cities
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Black-billed Cuckoo Relative Abundance
(Predicted Mean Count / Breeding Bird Survey)



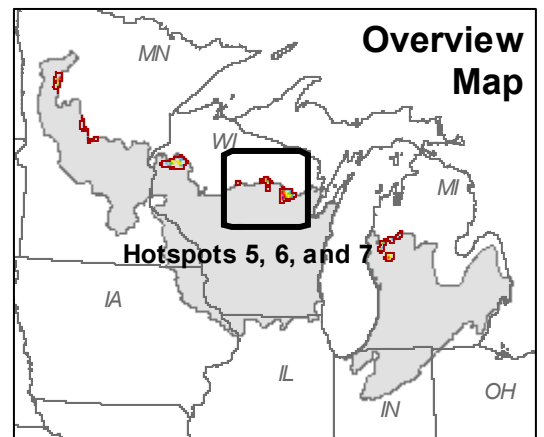
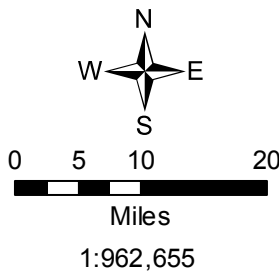
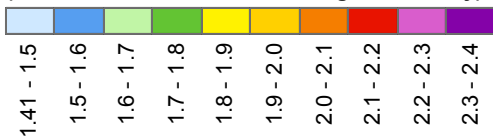
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with Tribal Lands

Hotspots 5, 6, and 7



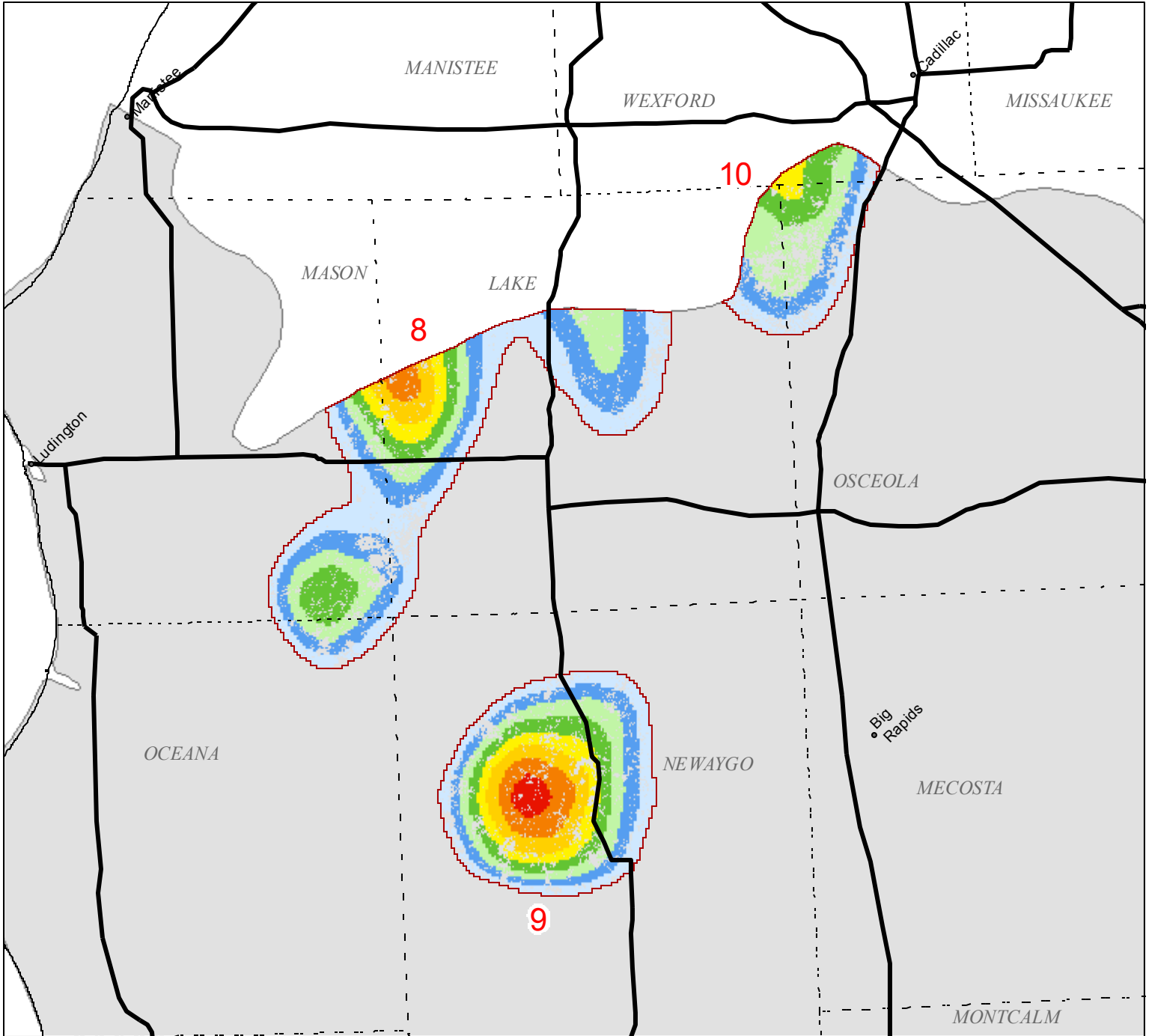
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Black-billed Cuckoo Relative Abundance
(Predicted Mean Count / Breeding Bird Survey)



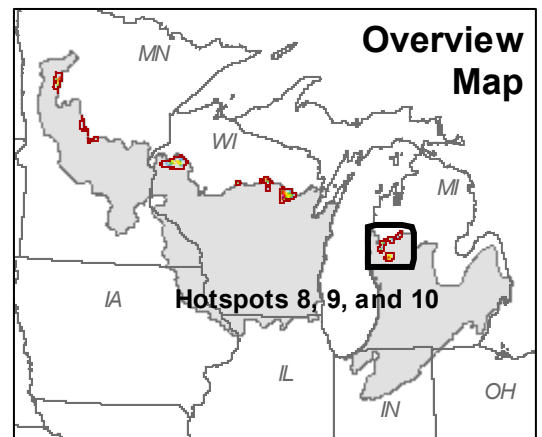
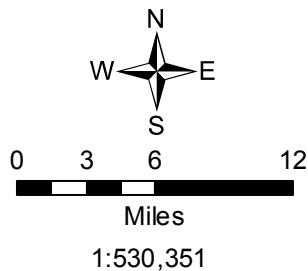
Black-Billed Cuckoo (BBCU) Predicted Relative Abundance Overlaid with Tribal Lands

Hotspots 8, 9, and 10



- Major Cities
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Black-billed Cuckoo Relative Abundance
(Predicted Mean Count / Breeding Bird Survey)



**Black-billed Cuckoo Predicted Relative Abundance Summary by Hotspot
Federal Managed Lands Versus Lands Not Under Federal Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
Hotspot 1 - Unmanaged by Federal	501.39	0.00	0.83	2.23	2.23	0.89	463,032	95.71	93.76
Hotspot 1 - Managed by Federal	22.48	0.00	1.23	2.05	2.05	0.90	30,825	4.29	6.24
Hotspot 2 - Unmanaged by Federal	266.94	0.00	0.57	1.54	1.54	0.72	169,434	100.00	100.00
Hotspot 2 - Managed by Federal	0.00								
Hotspot 3 - Unmanaged by Federal	174.93	0.00	0.68	1.82	1.82	0.76	132,809	100.00	100.00
Hotspot 3 - Managed by Federal	0.00								
Hotspot 4 - Unmanaged by Federal	1,160.74	0.00	0.90	2.01	2.01	0.84	1,164,430	100.00	100.00
Hotspot 4 - Managed by Federal	0.00								
Hotspot 5 - Unmanaged by Federal	107.23	0.00	1.02	1.96	1.96	0.81	121,325	100.00	100.00
Hotspot 5 - Managed by Federal	0.00								
Hotspot 6 - Unmanaged by Federal	426.39	0.00	1.36	2.40	2.40	0.71	644,325	100.00	100.00
Hotspot 6 - Managed by Federal	0.00								
Hotspot 7 - Unmanaged by Federal	889.88	0.00	1.61	2.37	2.37	0.60	1,590,000	99.78	99.81
Hotspot 7 - Managed by Federal	2.00	0.00	1.35	1.57	1.57	0.52	3,009	0.22	0.19
Hotspot 8 - Unmanaged by Federal	324.46	0.00	1.33	2.07	2.07	0.59	478,429	70.72	67.34
Hotspot 8 - Managed by Federal	134.34	0.00	1.55	2.06	2.06	0.38	232,022	29.28	32.66
Hotspot 9 - Unmanaged by Federal	183.66	0.00	1.29	2.15	2.15	0.73	263,629	53.84	47.90
Hotspot 9 - Managed by Federal	157.44	0.00	1.64	2.16	2.16	0.51	286,731	46.16	52.10
Hotspot 10 - Unmanaged by Federal	137.46	0.00	1.14	1.84	1.84	0.73	173,804	85.42	79.93
Hotspot 10 - Managed by Federal	23.46	0.00	1.67	1.87	1.87	0.31	43,641	14.58	20.07

SUMMARY

Total Area Unmanaged (sq km)	4,173.08	Sum* Total Unmanaged	5,201,217
Total Area Managed (sq km)	339.73	Sum* Total Managed	596,229
Total Area (sq km)	4,512.81	Total Sum*	5,797,446

Total Area Unmanaged %	92.47	Sum* Total Unmanaged %	89.72
Total Area Managed %	7.53	Sum* Total Managed %	10.28

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

**Black-billed Cuckoo Predicted Relative Abundance Summary by Hotspot
State Managed Lands Versus Lands Not Under State Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
Hotspot 1 - Unmanaged by State	447.15	0.00	0.77	2.23	2.23	0.88	381,718	85.35	77.29
Hotspot 1 - Managed by State	76.72	0.00	1.32	2.19	2.19	0.78	112,139	14.65	22.71
Hotspot 2 - Unmanaged by State	262.10	0.00	0.57	1.54	1.54	0.71	165,136	98.19	97.46
Hotspot 2 - Managed by State	4.84	0.00	0.80	1.54	1.54	0.73	4,298	1.81	2.54
Hotspot 3 - Unmanaged by State	166.11	0.00	0.67	1.82	1.82	0.76	122,954	94.96	92.58
Hotspot 3 - Managed by State	8.82	0.00	1.01	1.77	1.77	0.74	9,856	5.04	7.42
Hotspot 4 - Unmanaged by State	1,127.88	0.00	0.89	2.01	2.01	0.84	1,116,690	97.17	95.90
Hotspot 4 - Managed by State	32.85	0.00	1.31	1.74	1.74	0.57	47,732	2.83	4.10
Hotspot 5 - Unmanaged by State	106.87	0.00	1.02	1.96	1.96	0.81	120,753	99.66	99.53
Hotspot 5 - Managed by State	0.36	1.41	1.43	1.46	0.05	0.02	573	0.34	0.47
Hotspot 6 - Unmanaged by State	420.94	0.00	1.36	2.40	2.40	0.71	637,990	98.72	99.02
Hotspot 6 - Managed by State	5.45	0.00	1.05	1.72	1.72	0.71	6,335	1.28	0.98
Hotspot 7 - Unmanaged by State	887.02	0.00	1.61	2.37	2.37	0.60	1,585,440	99.45	99.52
Hotspot 7 - Managed by State	4.87	0.00	1.40	1.68	1.68	0.47	7,568	0.55	0.48
Hotspot 8 - Unmanaged by State	380.48	0.00	1.38	2.07	2.07	0.57	585,108	82.93	82.36
Hotspot 8 - Managed by State	78.33	0.00	1.44	1.69	1.69	0.38	125,343	17.07	17.64
Hotspot 9 - Unmanaged by State	338.03	0.00	1.45	2.16	2.16	0.66	545,437	99.10	99.11
Hotspot 9 - Managed by State	3.07	0.00	1.44	1.90	1.90	0.67	4,923	0.90	0.89
Hotspot 10 - Unmanaged by State	151.86	0.00	1.21	1.87	1.87	0.72	203,381	94.37	93.53
Hotspot 10 - Managed by State	9.06	0.00	1.40	1.66	1.66	0.41	14,064	5.63	6.47

SUMMARY

Total Area Unmanaged (sq km)	4,288.43	Sum* Total Unmanaged	5,464,607
Total Area Managed (sq km)	224.38	Sum* Total Managed	332,830
Total Area (sq km)	4,512.80	Total Sum*	5,797,437

Total Area Unmanaged %	95.03	Sum* Total Unmanaged %	94.26
Total Area Managed %	4.97	Sum* Total Managed %	5.74

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

**Black-billed Cuckoo Predicted Relative Abundance Summary by Hotspot
Tribal Lands Versus Lands Not Under Tribal Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
Hotspot 1 - Unmanaged by Tribal	1.45	0.00	1.33	1.46	1.46	0.35	2,152	0.28	0.44
Hotspot 1 - Managed by Tribal	522.41	0.00	0.85	2.23	2.23	0.89	491,706	99.72	99.56
Hotspot 2 - Unmanaged by Tribal	266.94	0.00	0.57	1.54	1.54	0.72	169,434	100.00	100.00
Hotspot 2 - Managed by Tribal	0.00								
Hotspot 3 - Unmanaged by Tribal	174.93	0.00	0.68	1.82	1.82	0.76	132,809	100.00	100.00
Hotspot 3 - Managed by Tribal	0.00								
Hotspot 4 - Unmanaged by Tribal	1,160.74	0.00	0.90	2.01	2.01	0.84	1,164,430	100.00	100.00
Hotspot 4 - Managed by Tribal	0.00								
Hotspot 5 - Unmanaged by Tribal	107.23	0.00	1.02	1.96	1.96	0.81	121,325	100.00	100.00
Hotspot 5 - Managed by Tribal	0.00								
Hotspot 6 - Unmanaged by Tribal	426.39	0.00	1.36	2.40	2.40	0.71	644,325	100.00	100.00
Hotspot 6 - Managed by Tribal	0.00								
Hotspot 7 - Unmanaged by Tribal	151.50	0.00	1.03	1.95	1.95	0.74	172,854	16.99	10.85
Hotspot 7 - Managed by Tribal	740.39	0.00	1.73	2.37	2.37	0.49	1,420,160	83.01	89.15
Hotspot 8 - Unmanaged by Tribal	458.81	0.00	1.39	2.07	2.07	0.54	710,451	100.00	100.00
Hotspot 8 - Managed by Tribal	0.00								
Hotspot 9 - Unmanaged by Tribal	341.10	0.00	1.45	2.16	2.16	0.66	550,359	100.00	100.00
Hotspot 9 - Managed by Tribal	0.00								
Hotspot 10 - Unmanaged by Tribal	160.92	0.00	1.22	1.87	1.87	0.71	217,445	100.00	100.00
Hotspot 10 - Managed by Tribal	0.00								

SUMMARY

Total Area Unmanaged (sq km)	3,250.01	Sum* Total Unmanaged	3,885,584
Total Area Managed (sq km)	1,262.80	Sum* Total Managed	1,911,866
Total Area (sq km)	4,512.81	Total Sum*	5,797,450

Total Area Unmanaged %	72.02	Sum* Total Unmanaged %	67.02
Total Area Managed %	27.98	Sum* Total Managed %	32.98

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

**Black-billed Cuckoo Predicted Relative Abundance Summary by State
Federal Managed Lands Versus Lands Not Under Federal Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
IA - Unmanaged by Federal	6,982.18	0.00	0.14	0.91	0.91	0.22	1,068,980	96.80	95.81
IA - Managed by Federal	230.67	0.00	0.18	0.95	0.95	0.31	46,749	3.20	4.19
IL - Unmanaged by Federal	3,208.05	0.00	0.06	0.41	0.41	0.13	220,889	96.68	93.41
IL - Managed by Federal	110.30	0.00	0.13	0.40	0.40	0.15	15,577	3.32	6.59
IN - Unmanaged by Federal	13,070.80	0.00	0.02	0.28	0.28	0.06	324,217	99.68	97.86
IN - Managed by Federal	41.35	0.00	0.15	0.28	0.28	0.10	7,103	0.32	2.14
MI - Unmanaged by Federal	57,537.80	0.00	0.17	2.15	2.15	0.31	10,786,300	98.06	88.68
MI - Managed by Federal	1,139.19	0.00	1.09	2.16	2.16	0.52	1,377,060	1.94	11.32
MN - Unmanaged by Federal	49,220.50	0.00	0.17	2.23	2.23	0.37	9,507,480	98.73	98.18
MN - Managed by Federal	635.37	0.00	0.25	2.05	2.05	0.46	176,268	1.27	1.82
OH - Unmanaged by Federal	110.41	0.00	0.05	0.21	0.21	0.09	6,384	100.00	100.00
OH - Managed by Federal	0.00								
WI - Unmanaged by Federal	96,519.50	0.00	0.23	2.40	2.40	0.39	24,818,199	99.00	98.50
WI - Managed by Federal	976.24	0.00	0.35	1.60	1.60	0.36	378,050	1.00	1.50

SUMMARY

Total Area Unmanaged (sq km)	226,649.24	Sum* Total Unmanaged	46,732,450
Total Area Managed (sq km)	3,133.12	Sum* Total Managed	2,000,808
Total Area (sq km)	229,782.36	Total Sum*	48,733,257

Total Area Unmanaged %	98.64	Sum* Total Unmanaged %	95.89
Total Area Managed %	1.36	Sum* Total Managed %	4.11

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

**Black-billed Cuckoo Predicted Relative Abundance Summary by State
State Managed Lands Versus Lands Not Under State Management**

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
IA - Unmanaged by State	7,046.34	0.00	0.13	0.95	0.95	0.22	1,044,570	97.69	93.62
IA - Managed by State	166.51	0.00	0.38	0.91	0.91	0.29	71,159	2.31	6.38
IL - Unmanaged by State	3,278.40	0.00	0.06	0.41	0.41	0.13	228,602	98.80	96.67
IL - Managed by State	39.95	0.00	0.18	0.40	0.40	0.17	7,864	1.20	3.33
IN - Unmanaged by State	12,948.40	0.00	0.02	0.28	0.28	0.06	312,657	98.75	94.37
IN - Managed by State	163.72	0.00	0.10	0.27	0.27	0.10	18,663	1.25	5.63
MI - Unmanaged by State	56,466.40	0.00	0.18	2.16	2.16	0.33	11,042,200	96.23	90.78
MI - Managed by State	2,210.56	0.00	0.46	1.90	1.90	0.43	1,121,180	3.77	9.22
MN - Unmanaged by State	48,427.60	0.00	0.17	2.23	2.23	0.36	9,020,100	97.14	93.15
MN - Managed by State	1,428.22	0.00	0.42	2.19	2.19	0.52	663,646	2.86	6.85
OH - Unmanaged by State	101.07	0.00	0.05	0.21	0.21	0.09	5,210	91.54	81.61
OH - Managed by State	9.34	0.00	0.11	0.21	0.21	0.10	1,174	8.46	18.39
WI - Unmanaged by State	94,536.00	0.00	0.23	2.40	2.40	0.39	23,770,601	96.96	94.34
WI - Managed by State	2,959.68	0.00	0.43	1.74	1.74	0.39	1,425,580	3.04	5.66

SUMMARY

Total Area Unmanaged (sq km)	222,804.21	Sum* Total Unmanaged	45,423,940
Total Area Managed (sq km)	6,977.98	Sum* Total Managed	3,309,267
Total Area (sq km)	229,782.19	Total Sum*	48,733,207

Total Area Unmanaged %	96.96	Sum* Total Unmanaged %	93.21
Total Area Managed %	3.04	Sum* Total Managed %	6.79

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.

Black-billed Cuckoo Predicted Relative Abundance Summary by State Tribal Lands Versus Lands Not Under Tribal Management

Description	Area (sq km)	Mean Predicted Count / Breeding Bird Survey				SD	Sum*	Percent Area Managed/ Unmanaged	Percent Sum* Managed/ Unmanaged
		Min	Mean	Max	Range				
IA - Unmanaged by Tribal	7,212.85	0.00	0.14	0.95	0.95	0.23	1,115,730	100.00	100.00
IA - Managed by Tribal	0.00								
IL - Unmanaged by Tribal	3,318.35	0.00	0.06	0.41	0.41	0.13	236,466	100.00	100.00
IL - Managed by Tribal	0.00								
IN - Unmanaged by Tribal	13,112.10	0.00	0.02	0.28	0.28	0.06	331,320	100.00	100.00
IN - Managed by Tribal	0.00								
MI - Unmanaged by Tribal	58,154.70	0.00	0.19	2.16	2.16	0.34	12,095,000	99.11	99.44
MI - Managed by Tribal	522.27	0.00	0.12	0.59	0.59	0.21	68,311	0.89	0.56
MN - Unmanaged by Tribal	47,959.20	0.00	0.17	1.82	1.82	0.35	8,930,370	96.20	92.22
MN - Managed by Tribal	1,896.59	0.00	0.36	2.23	2.23	0.66	753,384	3.80	7.78
OH - Unmanaged by Tribal	110.41	0.00	0.05	0.21	0.21	0.09	6,384	100.00	100.00
OH - Managed by Tribal	0.00								
WI - Unmanaged by Tribal	96,268.00	0.00	0.22	2.40	2.40	0.37	23,537,900	98.74	93.42
WI - Managed by Tribal	1,227.65	0.00	1.22	2.37	2.37	0.80	1,658,350	1.26	6.58

SUMMARY

Total Area Unmanaged (sq km)	226,135.61	Sum* Total Unmanaged	46,253,170
Total Area Managed (sq km)	3,646.51	Sum* Total Managed	2,480,045
Total Area (sq km)	229,782.12	Total Sum*	48,733,215

Total Area Unmanaged %	98.41	Sum* Total Unmanaged %	94.91
Total Area Managed %	1.59	Sum* Total Managed %	5.09

* Sum refers to the cumulative predicted relative abundance values for each cell (900 sq meters) in each managed category.

A note on interpretation: If the "Total Area Unmanaged" and "Sum* Total Unmanaged" exceeds that of their respective Managed cells, this indicates a majority of the area and population is outside of direct governmental jurisdiction. If the "Sum* Total Managed %" is less than the "Total Area Managed %", this indicates that the conservation estate does a poorer job than a random placement of managed lands. Conversely, if the "Sum* Total Managed %" exceeds that of the "Total Area Managed %", then the conservation estate does a better job than a random placement of the conservation estate.