

Appendix E-71: Permanent

- the participant has to speculate about the meaning of successional change. Is a "change" an increase or decrease in early successional habitats? Climate change also is speculative.
4. Agriculture/Forestry practices have different effects. Grouping these practices into a single category does not appropriately represent each individual practice. Point and non point pollution may have a positive or negative effect.

5. 1) Habitat loss through wetland drainage/ tiny stream ditching.
2) conversion of sand prairie nesting habitat to cropland or something else (e.g. forestation via fire prevention)

Manipulation of natural wetlands for management of other species has a disruptive impact on natural wetland dynamics. This may include reduced survival of Blanding's or reduced productivity of the habitat.

6. Loss of adjacent uplands or inappropriate cover/management. Blanding's requires nesting habitats that are secure from disturbance and that are within a reasonable distance to wetland habitats. Loss of appropriate habitat (ether due to tradition conversion to agriculture or to conversion of inappropriate conservation cover types) is negatively impacting reproductive success in this species. Long-distance movements
7. coal mining, agriculture

Total Respondents 7

13. What current monitoring efforts by state agencies are you aware of for the Wildlife in Permanent Wetland Habitats in Indiana?

	Yes, these efforts occur	Not aware of these efforts occurring	Response Total
Statewide year-round monitoring conducted by state agencies	0% (0)	100% (6)	6
Statewide once a year monitoring conducted by state agencies	0% (0)	100% (6)	6
Periodic statewide (less than once a year but still regularly scheduled) monitoring conducted by state agencies	0% (0)	100% (6)	6
Occasional statewide (less than once a year and not regularly scheduled) monitoring conducted by state agencies	17% (1)	83% (5)	6
Regional or local year-round monitoring conducted by state agencies	0% (0)	100% (6)	6
Regional or local once a year monitoring conducted by state agencies	0% (0)	100% (6)	6
Periodic regional or local (less than once a year but still regularly scheduled) monitoring conducted by state agencies	0% (0)	100% (6)	6
Occasional regional or local (less than once a year and not regularly scheduled) monitoring conducted by state agencies	50% (3)	50% (3)	6
		Total Respondents	48

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14. What current monitoring efforts by other organizations are you aware of for the Wildlife in Permanent Wetland Habitats in Indiana?

	Yes, these efforts occur	Not aware of these efforts occurring	Response Total
Statewide year-round monitoring conducted by other organizations	0% (0)	100% (6)	6
Statewide once a year monitoring conducted by other organizations	0% (0)	100% (6)	6
Periodic statewide (less than once a year but still regularly scheduled) monitoring conducted by other organizations	0% (0)	100% (6)	6
Occasional statewide (less than once a year and not regularly scheduled) monitoring conducted by other organizations	17% (1)	83% (5)	6
Regional or local year-round monitoring conducted by other organizations	0% (0)	100% (6)	6
Regional or local once a year monitoring conducted by other organizations	0% (0)	100% (6)	6
Periodic regional or local (less than once a year but still regularly scheduled) monitoring conducted by other organizations	0% (0)	100% (6)	6
Occasional regional or local (less than once a year and not regularly scheduled) monitoring conducted by other organizations	83% (5)	17% (1)	6
		Total Respondents	48

15. How crucial are these monitoring efforts by state agencies for the conservation of the Wildlife in Permanent Wetland Habitats in Indiana?

	Very crucial	Somewhat crucial	Slightly crucial	Not crucial	Unknown	Response Total
Statewide year-round monitoring conducted by state agencies	0% (0)	0% (0)	20% (1)	80% (4)	0% (0)	5
Statewide once a year monitoring conducted by state agencies	0% (0)	20% (1)	0% (0)	80% (4)	0% (0)	5
Periodic statewide (less than once a year but still regularly scheduled) monitoring conducted by state agencies	0% (0)	40% (2)	0% (0)	60% (3)	0% (0)	5
Occasional statewide (less than once a year and not regularly scheduled) monitoring conducted by state agencies	20% (1)	20% (1)	20% (1)	40% (2)	0% (0)	5
Regional or local year-round monitoring conducted by state agencies	0% (0)	0% (0)	20% (1)	80% (4)	0% (0)	5
Regional or local once a year monitoring conducted by state agencies	0% (0)	0% (0)	20% (1)	80% (4)	0% (0)	5
Periodic regional or local (less than once a year but still regularly scheduled) monitoring conducted by state agencies	0% (0)	20% (1)	20% (1)	40% (2)	20% (1)	5

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Occasional regional or local (less than once a year and not regularly scheduled) monitoring conducted by state agencies	17% (1)	50% (3)	0% (0)	33% (2)	0% (0)	6
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Total Respondents 41

16. How crucial are these monitoring efforts by other organizations for the conservation of the Wildlife in Permanent Wetland Habitats in Indiana?

	Very crucial	Somewhat crucial	Slightly crucial	Not crucial	Unknown	Response Total
Statewide year-round monitoring conducted by other organizations	0% (0)	0% (0)	0% (0)	80% (4)	20% (1)	5
Statewide once a year monitoring conducted by other organizations	0% (0)	0% (0)	0% (0)	80% (4)	20% (1)	5
Periodic statewide (less than once a year but still regularly scheduled) monitoring conducted by other organizations	20% (1)	0% (0)	0% (0)	60% (3)	20% (1)	5
Occasional statewide (less than once a year and not regularly scheduled) monitoring conducted by other organizations	40% (2)	0% (0)	0% (0)	40% (2)	20% (1)	5
Regional or local year-round monitoring conducted by other organizations	0% (0)	0% (0)	0% (0)	75% (3)	25% (1)	4
Regional or local once a year monitoring conducted by other organizations	0% (0)	0% (0)	0% (0)	75% (3)	25% (1)	4
Periodic regional or local (less than once a year but still regularly scheduled) monitoring conducted by other organizations	20% (1)	0% (0)	0% (0)	40% (2)	40% (2)	5
Occasional regional or local (less than once a year and not regularly scheduled) monitoring conducted by other organizations	33% (2)	33% (2)	17% (1)	0% (0)	17% (1)	6
Total Respondents						39

17. Regional or local state agency monitoring for the Wildlife in Permanent Wetland Habitats in Indiana.

1. INDR Nature Preserve Division
2. I'd guess that agencies that issue drainage permits are relevant here.
3. Fish Creek, Patoka River, Pigeon Creek

Total Respondents 3

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18. Regional or local monitoring by other organizations for the Wildlife in Permanent Wetland Habitats in Indiana.

1. Robert Brodman, Saint Joseph's College
"BioBlitz" in Lake Co.
2. Herp Center at IUPFW - I presume they've done something in Steuben and La Grange Cos.
3. Fish Creek, Patoka River, Pigeon Creek, Muscatatuck River

Total Respondents 3

19. Please list organizations that are monitoring the Wildlife in Permanent Wetland Habitats in Indiana.

1. Ball State University; Tom Morrell.
2. Indiana Division of Fish and Wildlife. Population monitoring efforts at state, regional and local scales are to monitor annual trends. Monitoring programs used by IDF&W are not habitat specific for muskrat.
3. What I know is above.
4. TNC has funded some work at Cline Lake Fen to better understand population dynamics, habitat use, etc...
5. Bruce Kingsbury, IUPU Fort Wayne,

Total Respondents 5

20. What are the current monitoring techniques for the Wildlife in Permanent Wetland Habitats in Indiana?

	Frequently used	Occasionally used	Not used but possible with existing technology and data	Not used and not possible with existing technology and data	Not economically feasible	Unknown	Response Total
Radio telemetry and tracking	0% (0)	60% (3)	20% (1)	20% (1)	0% (0)	0% (0)	5
Modeling	0% (0)	25% (1)	25% (1)	0% (0)	0% (0)	50% (2)	4
Coverboard routes	0% (0)	0% (0)	25% (1)	25% (1)	0% (0)	50% (2)	4
Spot mapping	20% (1)	40% (2)	0% (0)	20% (1)	0% (0)	20% (1)	5
Driving a survey route	0% (0)	0% (0)	0% (0)	50% (2)	0% (0)	50% (2)	4
Reporting from harvest, depredation, or unintentional take (road kill, bycatch)	0% (0)	40% (2)	0% (0)	40% (2)	0% (0)	20% (1)	5

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Mark and recapture	0% (0)	20% (1)	20% (1)	20% (1)	0% (0)	40% (2)	5
Professional survey/census	0% (0)	50% (2)	25% (1)	0% (0)	0% (0)	25% (1)	4
Volunteer survey/census	0% (0)	20% (1)	40% (2)	0% (0)	0% (0)	40% (2)	5
Trapping (by any technique)	0% (0)	50% (2)	25% (1)	0% (0)	0% (0)	25% (1)	4
Representative sites	0% (0)	80% (4)	0% (0)	0% (0)	0% (0)	20% (1)	5
Probabilistic sites	0% (0)	50% (2)	0% (0)	0% (0)	0% (0)	50% (2)	4
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (2)	2
Total Respondents							56

21. Other monitoring techniques for the Wildlife in Permanent Wetland Habitats in Indiana.

1. Look for burrows in muck

Total Respondents 1

22. What one or two monitoring techniques would you recommend for effective conservation of the Wildlife in Permanent Wetland Habitats in Indiana?

1. Professional surveys
2. look for burrows in muck connected with trapping
3. IDF&W uses Harvest Reports and Professional Surveys. Here again, the assumption is that aquatic systems include all habitat types occupied by muskrat.
 - 1) radiotrack females to nesting sites.
 - 2) monitor nests for depredation
4. (Both somewhat labor-intensive for at least one person.)

Total Respondents 4

23. What current HABITAT inventory and assessment efforts or activities by state agencies are you aware of for the Wildlife in Permanent Wetland Habitats in Indiana?

	Yes, these efforts occur	No effort that I'm aware of	Response Total
Statewide annual inventory and assessment conducted by state agencies	0% (0)	100% (6)	6
Statewide once a year inventory and assessment conducted by state agencies	0% (0)	100% (6)	6
Periodic statewide (less than once a year but still regularly			

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scheduled) inventory and assessment conducted by state agencies			
Occasional statewide (less than once a year and not regularly scheduled) inventory and assessment conducted by state agencies	17% (1)	83% (5)	6
Regional or local year-round inventory and assessment conducted by state agencies	0% (0)	100% (6)	6
Regional or local once a year inventory and assessment conducted by state agencies	0% (0)	100% (6)	6
Periodic regional or local (less than once a year but still regularly scheduled) inventory and assessment conducted by state agencies	0% (0)	100% (6)	6
Occasional regional or local (less than once a year and not regularly scheduled) inventory and assessment conducted by state agencies	0% (0)	100% (6)	6
		Total Respondents	48

24. What current HABITAT inventory and assessment efforts or activities by other organizations are you aware of for the Wildlife in Permanent Wetland Habitats in Indiana?

	Yes, these efforts occur	No effort that I'm aware of	Response Total
Statewide year-round inventory and assessment conducted by other organizations	0% (0)	100% (6)	6
Statewide once a year inventory and assessment conducted by other organizations	0% (0)	100% (6)	6
Periodic statewide (less than once a year but still regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	100% (6)	6
Occasional statewide (less than once a year and not regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	100% (6)	6
Regional or local year-round inventory and assessment conducted by other organizations	0% (0)	100% (6)	6
Regional or local once a year inventory and assessment conducted by other organizations	0% (0)	100% (6)	6
Periodic regional or local (less than once a year but still regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	100% (6)	6
Occasional regional or local (less than once a year and not regularly scheduled) inventory and assessment conducted by other organizations	50% (3)	50% (3)	6
		Total Respondents	48

25. How crucial are these HABITAT efforts by state agencies for the conservation of the Wildlife in Permanent Wetland Habitats in Indiana?

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			with existing technology and data	with existing technology and data				
GIS mapping	0% (0)	33% (2)	33% (2)	0% (0)	0% (0)	33% (2)	6	
Aerial photography and analysis	0% (0)	17% (1)	17% (1)	17% (1)	0% (0)	50% (3)	6	
Systematic sampling	0% (0)	17% (1)	0% (0)	17% (1)	0% (0)	67% (4)	6	
Property tax estimates	0% (0)	0% (0)	0% (0)	40% (2)	0% (0)	60% (3)	5	
State revenue data	0% (0)	0% (0)	0% (0)	40% (2)	0% (0)	60% (3)	5	
Regulatory information	0% (0)	20% (1)	0% (0)	40% (2)	0% (0)	40% (2)	5	
Participation in landuse programs	0% (0)	20% (1)	0% (0)	40% (2)	0% (0)	40% (2)	5	
Modeling	0% (0)	0% (0)	20% (1)	20% (1)	0% (0)	60% (3)	5	
Voluntary landowner reporting	0% (0)	0% (0)	0% (0)	40% (2)	0% (0)	60% (3)	5	
Other (please specify below)	0% (0)	0% (0)	0% (0)	25% (1)	0% (0)	75% (3)	4	
Total Respondents							52	

31. Other HABITAT inventory and assessment techniques for the Wildlife in Permanent Wetland Habitats in Indiana.

look for runways in muck and trap for them

Total Respondents 1

32. What one or two HABITAT inventory and assessment techniques would you recommend for effective conservation of the Wildlife in Permanent Wetland Habitats in Indiana?

1. Sysematic sampling & GIS
 - 1) High resolution aerial photography at normal marsh water levels - digitize for GIS.
2.
 - 2) Monitor wetland vegetation - blandings prefer floating emergents (e.g. duck weed) and get crowded out by cattail expansion.

Total Respondents 2

33. What is the current body of science for the Wildlife in Permanent Wetland Habitats in Indiana?

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		Response Total	Response Percent
Complete, up to date and extensive		0	0%
Adequate		1	17%
Inadequate		4	67%
Nonexistent		0	0%
Other (please explain below)	Literature is not habitat specific for muskrats in Indiana	1	17%
Total Respondents		6	

34. Please provide a citation (title, author, date, publisher) that would give the best overview of the Wildlife in Permanent Wetland Habitats in Indiana, if available. This resource may be used if further detail is needed.

		Response Total	Response Percent
Title	<ol style="list-style-type: none"> 2. Fur animals of Indiana 4. Status and Distribution of candidate endangered herpetofauna in the Fish Creek watershed 	2	50%
Author	<ol style="list-style-type: none"> 1. Mumford and Whitaker 1982 2. David Brooks 3. review Minton's guide 4. Bruce Kingsbury, Spencer Cortwright 	4	100%
Date	<ol style="list-style-type: none"> 2. 1959 3. 2001 4. 1994 	3	75%
Publisher	<ol style="list-style-type: none"> 2. IDF&W 3. Get BioBlitz & IUPFW reports from DNR 4. IDNR Division of Fish and Wildlife 	3	75%
Total Respondents		4	

35. If possible, please provide a second citation (title, author, date, publisher) that would give another good overview of the Wildlife in Permanent Wetland Habitats in Indiana. This resource may also be used if further detail is needed.

		Response Total	Response Percent
Title	ongoing background work in NE & MN	1	100%
Author		0	0%
Date		0	0%
Publisher		0	0%
Total Respondents		1	

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36. What is the current HABITAT body of science for the Wildlife in Permanent Wetland Habitats in Indiana?

		Response Total	Response Percent
Complete, up to date and extensive		0	0%
Adequate		1	17%
Inadequate		4	67%
Nonexistent		0	0%
Other (please explain below)	unknown	1	17%
Total Respondents		6	

37. Please provide a citation (title, author, date, publisher) that would give the best HABITAT overview of the Wildlife in Permanent Wetland Habitats in Indiana, if available. This resource may be used if further detail is needed.

		Response Total	Response Percent
Title	Not my expertise	1	100%
Author	contact JW Lang for NE & MN	1	100%
Date		0	0%
Publisher		0	0%
Total Respondents		1	

38. If possible, please provide a second citation (title, author, date, publisher) that would give another good HABITAT overview of the Wildlife in Permanent Wetland Habitats in Indiana. This resource may also be used if further detail is needed.

		Response Total	Response Percent
Title		0	0%
Author		0	0%
Date		0	0%
Publisher		0	0%
Total Respondents		0	

39. What are the research needs for the Wildlife in Permanent Wetland Habitats in Indiana?

	Urgently needed	Greatly needed	Needed	Slightly needed	Not needed	Unknown	Response Total	
Life cycle	17% (1)	0% (0)	50% (3)	17% (1)	17% (1)	0% (0)	6	
Distribution and abundance	17% (1)	33% (2)	17% (1)	17% (1)	17% (1)	0% (0)	6	

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Limiting factors (food, shelter, water, breeding sites)	67% (4)	0% (0)	0% (0)	17% (1)	17% (1)	0% (0)	6
Threats (predators/competition, contamination)	33% (2)	0% (0)	17% (1)	33% (2)	17% (1)	0% (0)	6
Relationship/dependence on specific habitats	33% (2)	17% (1)	33% (2)	0% (0)	17% (1)	0% (0)	6
Population health (genetic and physical)	33% (2)	0% (0)	33% (2)	17% (1)	17% (1)	0% (0)	6
Other (please specify below)	0% (0)	25% (1)	0% (0)	0% (0)	0% (0)	75% (3)	4
							Total Respondents 40

40. Other research needs for the Wildlife in Permanent Wetland Habitats in Indiana.

1. Research needs as related to muskrats are not habitat specific.
2. 1) Longterm fidelity to specific sites.
2) Limits to sand prairie needs for nesting.
3) Limits to recruitment when forced to nest in rowcrop areas.

Total Respondents 2

41. What are the HABITAT research needs for the Wildlife in Permanent Wetland Habitats in Indiana?

	Urgently needed	Greatly needed	Needed	Slightly needed	Not needed	Unknown	Response Total
Successional changes	0% (0)	67% (4)	17% (1)	17% (1)	0% (0)	0% (0)	6
Distribution and abundance (fragmentation)	17% (1)	67% (4)	0% (0)	17% (1)	0% (0)	0% (0)	6
Threats (land use change/competition, contamination/global warming)	33% (2)	17% (1)	17% (1)	17% (1)	0% (0)	17% (1)	6
Relationship/dependence on specific site conditions	33% (2)	33% (2)	0% (0)	17% (1)	0% (0)	17% (1)	6
Growth and development of individual components of the habitat	0% (0)	60% (3)	20% (1)	0% (0)	0% (0)	20% (1)	5
Other (please specify below)	25% (1)	0% (0)	25% (1)	0% (0)	0% (0)	50% (2)	4
							Total Respondents 33

42. Other HABITAT research needs for the Wildlife in Permanent Wetland Habitats in Indiana.

1. Prairie restoration & fire management to perpetuate small sand blowouts
2. The relationship between upland nesting habitat, dispersal distance, barriers to dispersal etc may be critical information for the conservation of this turtle.

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Total Respondents 2

43. How well do the following conservation efforts address the threats to the Wildlife in Permanent Wetland Habitats in Indiana?

	Very well	Somewhat	Not at all	Not used	Unknown	Response Total
Habitat protection (use below for details)	0% (0)	83% (5)	17% (1)	0% (0)	0% (0)	6
Population management (hunting, trapping)	17% (1)	0% (0)	17% (1)	67% (4)	0% (0)	6
Population enhancement (captive breeding and release)	0% (0)	0% (0)	0% (0)	83% (5)	17% (1)	6
Reintroduction (restoration)	0% (0)	0% (0)	0% (0)	83% (5)	17% (1)	6
Food plots	0% (0)	0% (0)	17% (1)	83% (5)	0% (0)	6
Threats reduction	0% (0)	17% (1)	0% (0)	50% (3)	33% (2)	6
Native predator control	0% (0)	0% (0)	0% (0)	83% (5)	17% (1)	6
Exotic/invasive species control	0% (0)	0% (0)	0% (0)	83% (5)	17% (1)	6
Regulation of collecting	0% (0)	67% (4)	0% (0)	33% (2)	0% (0)	6
Disease/parasite management	0% (0)	0% (0)	0% (0)	83% (5)	17% (1)	6
Translocation to new geographic range	0% (0)	0% (0)	0% (0)	100% (5)	0% (0)	5
Protection of migration routes	0% (0)	0% (0)	17% (1)	50% (3)	33% (2)	6
Limiting contact with pollutants/contaminants	0% (0)	17% (1)	0% (0)	33% (2)	50% (3)	6
Public education to reduce human disturbance	0% (0)	33% (2)	17% (1)	17% (1)	33% (2)	6
Culling/selective removal	0% (0)	0% (0)	0% (0)	83% (5)	17% (1)	6
Stocking	0% (0)	0% (0)	0% (0)	83% (5)	17% (1)	6
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	100% (3)	3
				Total Respondents		98

44. Other current conservation practices for the Wildlife in Permanent Wetland Habitats in Indiana.

Preserve wetlands

Total Respondents 0

45. What one or two specific practices would you recommend for more effective conservation of the Wildlife in Permanent Wetland Habitats in Indiana?

1. Habitat protection

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2. See #43. In addition, although not habitat specific, outreach programs are needed to effectively and accurately educate citizens about wildlife (game and non-game), the wildlife conservation model (for game and non-game), and the need for effective muskrat management programs.

3. 1) Restoration in new, very large natural areas in NW Indiana.
2) Raccoon reduction near constrained (small) areas of occupied habitat in NE Indiana.

4. Design and management of conservation areas that specifically incorporate life history requirements of the Blanding's turtle across relatively large habitats (>1,000 acres). Some species are too often subjected to management decisions that favor other species, and these often have a negative impact on available wetland and nesting habitat. In some cases, these management decisions seem likely to result in direct mortality of adults and eggs.

5. Restoration of habitat and connectivity

Total Respondents 5

46. How well do the following conservation efforts address the HABITAT threats to the Wildlife in Permanent Wetland Habitats in Indiana?

	Very well	Somewhat	Not at all	Not used	Unknown	Response Total
Habitat protection through regulation	0% (0)	60% (3)	20% (1)	0% (0)	20% (1)	5
Habitat protection on public lands	40% (2)	40% (2)	20% (1)	0% (0)	0% (0)	5
Habitat protection incentives (financial)	0% (0)	50% (2)	0% (0)	0% (0)	50% (2)	4
Habitat restoration through regulation	0% (0)	40% (2)	20% (1)	0% (0)	40% (2)	5
Habitat restoration on public lands	20% (1)	20% (1)	20% (1)	20% (1)	20% (1)	5
Habitat restoration incentives (financial)	0% (0)	40% (2)	0% (0)	20% (1)	40% (2)	5
Artificial habitat creation (artificial reefs, nesting platforms)	0% (0)	20% (1)	0% (0)	40% (2)	40% (2)	5
Selective use of functionally equivalent exotic species in place of extirpated natives	0% (0)	0% (0)	0% (0)	80% (4)	20% (1)	5
Succession control (fire, mowing)	20% (1)	20% (1)	20% (1)	20% (1)	20% (1)	5
Corridor development/protection	0% (0)	0% (0)	20% (1)	60% (3)	20% (1)	5
Managing water regimes	0% (0)	40% (2)	20% (1)	20% (1)	20% (1)	5
Pollution reduction	0% (0)	20% (1)	0% (0)	20% (1)	60% (3)	5
Protection of adjacent buffer zone	20% (1)	0% (0)	20% (1)	40% (2)	20% (1)	5
Restrict public access and disturbance	0% (0)	0% (0)	20% (1)	40% (2)	40% (2)	5
Land use planning	0% (0)	20% (1)	20% (1)	40% (2)	20% (1)	5
Technical assistance	0% (0)	0% (0)	0% (0)	40% (2)	60% (3)	5
Cooperative land management agreements (conservation easements)	0% (0)	40% (2)	0% (0)	0% (0)	60% (3)	5
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	100% (2)	2
						Total Respondents 86

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47. Other current HABITAT conservation practices for the Wildlife in Permanent Wetland Habitats in Indiana.

No responses were entered for this question.

Total Respondents 0

48. What one or two specific HABITAT practices would you recommend for more effective conservation of the Wildlife in Permanent Wetland Habitats in Indiana?

1. Wwtland protection
2. anything that helps to preserve wetlands could help this animal.
 - 1) Use fire to maintain large sand prairies near appropriate wetlands
 - 2) Acquire/purchase easments on additional blocks of land that have permanent wetlands associated with large sandy uplands.
3. Protection, restoration and appropriate management of adjacent uplands as nesting habitat around known populations
4. restore habitat and connectivity, allow beaver activity

Total Respondents 5

49. Do you have any additional comments or information on the Wildlife in Permanent Wetland Habitats that you feel would be useful in the development of the Indiana Comprehensive Wildlife Strategy?

1. Four-toed salamanders have a very spotty distribution that is poorly understood. They are often not found in habitats that seem ideally suited but then found in what one might call an inferior site.

Contiguous blandings populations have 4000 >yearling turtles in Minnesota and 140000 >yearling turtles in Nebraska, among the largest for any turtle in the USA. Main habitat components include big shallow but permanent wetlands, and very large sand prairies for nesting - so large as to be non-economical for regular raccoon use (some foxes & others use). These places have excellent juvenile recruitment, evidently not seen in other habitat. Take it from here.
- 2.

Total Respondents 2