

Appendix E-72: Wetlands Shrub/Scrub

Specialized reproductive behavior or low reproductive rates	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	1
Degradation of movement/migration routes (overwintering habitats, nesting and staging sites)	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Genetic pollution (hybridization)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Unknown	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0
							Total Respondents 9

8. Other threats to the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

No responses were entered for this question.

Total Respondents 0

(skipped this question) 1

9. Please briefly describe the top two threats to the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana identified above.

1. loss of early successional habitat.
hybridization with blue-winged warbler.

Total Respondents 1

10. Please rank the following threats to the HABITAT of the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

	Critical threat	Serious threat	Somewhat of a threat	Slight threat	No threat	Unknown	Response Total
Commercial or residential development (sprawl)	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Counterproductive financial incentives or regulations	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Invasive/non-native species	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
Nonpoint source pollution (sedimentation and nutrients)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
Habitat fragmentation	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	1
Successional change	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Diseases (of plants that create habitat)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Habitat degradation	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Climate change	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1

Appendix E-72: Wetlands Shrub/Scrub

Stream channelization	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Impoundment of water/flow regulation	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	1
Agricultural/forestry practices	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Residual contamination (persistent toxins)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
Point source pollution (continuing)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
Mining/acidification	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
Drainage practices (stormwater runoff)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
Unknown	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0
Total Respondents							16

11. Other HABITAT threats to the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

No responses were entered for this question.

Total Respondents 0

(skipped this question) 1

12. Please briefly describe the top two HABITAT threats to the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana identified above.

1. loss of early successional woody habitat.
habitat loss to development

Total Respondents 1

13. What current monitoring efforts by state agencies are you aware of for the Wildlife in Shrub/ Scrub 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% (1)	1
Statewide once a year monitoring conducted by state agencies	0% (0)	100% (1)	1
Periodic statewide (less than once a year but still regularly scheduled) monitoring conducted by state agencies	0% (0)	100% (1)	1
Occasional statewide (less than once a year and not regularly scheduled) monitoring conducted by state agencies	0% (0)	100% (1)	1
Regional or local year-round monitoring conducted by state	0% (0)	100% (1)	1

Appendix E-72: Wetlands Shrub/Scrub

agencies			
Regional or local once a year monitoring conducted by state agencies	0% (0)	100% (1)	1
Periodic regional or local (less than once a year but still regularly scheduled) monitoring conducted by state agencies	0% (0)	100% (1)	1
Occasional regional or local (less than once a year and not regularly scheduled) monitoring conducted by state agencies	0% (0)	100% (1)	1
		Total Respondents	8

14. What current monitoring efforts by other organizations are you aware of for the Wildlife in Shrub/ Scrub 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% (1)	1
Statewide once a year monitoring conducted by other organizations		100% (1)	0% (0)	1
Periodic statewide (less than once a year but still regularly scheduled) monitoring conducted by other organizations		0% (0)	100% (1)	1
Occasional statewide (less than once a year and not regularly scheduled) monitoring conducted by other organizations		0% (0)	100% (1)	1
Regional or local year-round monitoring conducted by other organizations		0% (0)	100% (1)	1
Regional or local once a year monitoring conducted by other organizations		0% (0)	100% (1)	1
Periodic regional or local (less than once a year but still regularly scheduled) monitoring conducted by other organizations		0% (0)	100% (1)	1
Occasional regional or local (less than once a year and not regularly scheduled) monitoring conducted by other organizations		0% (0)	100% (1)	1
			Total Respondents	8

15. How crucial are these monitoring efforts by state agencies for the conservation of the Wildlife in Shrub/ Scrub 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)	0% (0)	100% (1)	0% (0)	1
Statewide once a year monitoring conducted by state agencies		0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Periodic statewide (less than once a year							

Appendix E-72: Wetlands Shrub/Scrub

17. Regional or local state agency monitoring for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

1. none

Total Respondents 1

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

1. federal Breeding Bird Survey statewide; May Day Bird Count, Summer Bird Count

Total Respondents 1

19. Please list organizations that are monitoring the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

1. USGS, birding groups

Total Respondents 1

20. What are the current monitoring techniques for the Wildlife in Shrub/ Scrub 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)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Modeling	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Coverboard routes	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0
Spot mapping	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Driving a survey route	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	1
Reporting from harvest, depredation, or unintentional take (road kill, bycatch)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0
Mark and recapture	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Professional survey/census	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1

Appendix E-72: Wetlands Shrub/Scrub

Volunteer survey/census	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	1												
Trapping (by any technique)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1												
Representative sites	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1												
Probabilistic sites	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1												
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0												
Total Respondents							10												

21. Other monitoring techniques for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

No responses were entered for this question.

Total Respondents **0**

(skipped this question) **1**

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

1. spot-mapping in appropriate habitats

Total Respondents **1**

23. What current HABITAT inventory and assessment efforts or activities by state agencies are you aware of for the Wildlife in Shrub/ Scrub 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% (1)	1
Statewide once a year inventory and assessment conducted by state agencies	0% (0)	100% (1)	1
Periodic statewide (less than once a year but still regularly scheduled) inventory and assessment conducted by state agencies	0% (0)	100% (1)	1
Occasional statewide (less than once a year and not regularly scheduled) inventory and assessment conducted by state agencies	0% (0)	100% (1)	1
Regional or local year-round inventory and assessment conducted by state agencies	0% (0)	100% (1)	1
Regional or local once a year inventory and assessment conducted by state agencies	0% (0)	100% (1)	1

Appendix E-72: Wetlands Shrub/Scrub

Periodic regional or local (less than once a year but still regularly scheduled) inventory and assessment conducted by state agencies	0% (0)	100% (1)	1
Occasional regional or local (less than once a year and not regularly scheduled) inventory and assessment conducted by state agencies	0% (0)	100% (1)	1
		Total Respondents	8

24. What current HABITAT inventory and assessment efforts or activities by other organizations are you aware of for the Wildlife in Shrub/ Scrub 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% (1)	1
Statewide once a year inventory and assessment conducted by other organizations	0% (0)	100% (1)	1
Periodic statewide (less than once a year but still regularly scheduled) inventory and assessment conducted by other organizations	100% (1)	0% (0)	1
Occasional statewide (less than once a year and not regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	100% (1)	1
Regional or local year-round inventory and assessment conducted by other organizations	0% (0)	100% (1)	1
Regional or local once a year inventory and assessment conducted by other organizations	0% (0)	100% (1)	1
Periodic regional or local (less than once a year but still regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	100% (1)	1
Occasional regional or local (less than once a year and not regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	100% (1)	1
		Total Respondents	8

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

	These efforts are very crucial for this HABITAT	These efforts are somewhat crucial for this HABITAT	These efforts are slightly crucial for this HABITAT	These efforts are not crucial for this HABITAT	Unknown	Response Total
Statewide annual inventory and assessment conducted by state agencies	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Statewide once a year inventory and						

Appendix E-72: Wetlands Shrub/Scrub

and assessment conducted by other organizations							
Regional or local once a year inventory and assessment conducted by other organizations	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)		1
Periodic regional or local (less than once a year but still regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)		1
Occasional regional or local (less than once a year and not regularly scheduled) inventory and assessment conducted by other organizations	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)		1
						Total Respondents	8

27.	Regional or local state agency HABITAT inventory and assessment for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.
1.	none
	Total Respondents 1

28.	Regional or local HABITAT inventory and assessment by other organizations for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.
1.	statewide aerial imagery
	Total Respondents 1

29.	Please list organizations that are monitoring this HABITAT for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.
1.	USDA?
	Total Respondents 1

30.	What are the current HABITAT inventory and/or assessment techniques for Wildlife in Shrub/ Scrub 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
GIS mapping	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Aerial							

Appendix E-72: Wetlands Shrub/Scrub

Other (please explain below)	0	0%
	Total Respondents	1

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

		Response Total	Response Percent
Title	BNA Account - Golden-winged Warbler	1	100%
Author	JL Confer	1	100%
Date	1992	1	100%
Publisher	American Ornithologists' Union	1	100%
		Total Respondents	1

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

		Response Total	Response Percent
Title	Birds of Indiana	1	100%
Author	R Mumford and C. Keller	1	100%
Date	1984	1	100%
Publisher	Indiana Univerisity Press	1	100%
		Total Respondents	1

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

		Response Total	Response Percent
Complete, up to date and extensive		0	0%
Adequate		0	0%
Inadequate		1	100%
Nonexistent		0	0%
Other (please explain below)		0	0%
		Total Respondents	1

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

Appendix E-72: Wetlands Shrub/Scrub

		Response Total	Response Percent
Title	see previous sources	1	100%
Author		0	0%
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 Shrub/ Scrub 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	
(skipped this question)			1

39. What are the research needs for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana?

	Urgently needed	Greatly needed	Needed	Slightly needed	Not needed	Unknown	Response Total											
Life cycle	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1											
Distribution and abundance	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1											
Limiting factors (food, shelter, water, breeding sites)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1											
Threats (predators/competition, contamination)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1											
Relationship/dependence on specific habitats	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1											
Population health (genetic and physical)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1											
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0											
Total Respondents							6											

40. Other research needs for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

Appendix E-72: Wetlands Shrub/Scrub

No responses were entered for this question.

Total Respondents **0**
(skipped this question) 1

41. What are the HABITAT research needs for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana?

	Urgently needed	Greatly needed	Needed	Slightly needed	Not needed	Unknown	Response Total
Successional changes	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Distribution and abundance (fragmentation)	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Threats (land use change/competition, contamination/global warming)	0% (0)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Relationship/dependence on specific site conditions	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Growth and development of individual components of the habitat	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0
	Total Respondents						5

42. Other HABITAT research needs for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

No responses were entered for this question.

Total Respondents **0**
(skipped this question) 1

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

	Very well	Somewhat	Not at all	Not used	Unknown	Response Total
Habitat protection (use below for details)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Population management (hunting, trapping)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Population enhancement (captive breeding and release)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Reintroduction (restoration)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Food plots	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Threats reduction	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1

Appendix E-72: Wetlands Shrub/Scrub

Native predator control	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Exotic/invasive species control	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Regulation of collecting	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Disease/parasite management	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
Translocation to new geographic range	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Protection of migration routes	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Limiting contact with pollutants/contaminants	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
Public education to reduce human disturbance	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Culling/selective removal	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Stocking	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0
Total Respondents						16

44. Other current conservation practices for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

No responses were entered for this question.

Total Respondents 0

(skipped this question) 1

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

- Habitat protection and habitat manipulation.

Total Respondents 1

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

	Very well	Somewhat	Not at all	Not used	Unknown	Response Total
Habitat protection through regulation	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Habitat protection on public lands	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Habitat protection incentives (financial)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Habitat restoration through regulation	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Habitat restoration on public lands	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Habitat restoration incentives (financial)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Artificial habitat creation (artificial reefs, nesting platforms)	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1

Appendix E-72: Wetlands Shrub/Scrub

Selective use of functionally equivalent exotic species in place of extirpated natives	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Succession control (fire, mowing)	100% (1)	0% (0)	0% (0)	0% (0)	0% (0)	1
Corridor development/protection	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Managing water regimes	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	1
Pollution reduction	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	1
Protection of adjacent buffer zone	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Restrict public access and disturbance	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Land use planning	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Technical assistance	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Cooperative land management agreements (conservation easements)	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)	1
Other (please specify below)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0
Total Respondents						17

47. Other current HABITAT conservation practices for the Wildlife in Shrub/ Scrub Wetland Habitats in Indiana.

No responses were entered for this question.

Total Respondents **0**

(skipped this question) 1

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

- retard succession to desired habitat stage; incentives to conserve shrubby habitats.

Total Respondents **1**

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

No responses were entered for this question.

Total Respondents **-1**

(skipped this question) 2