

BARREN LANDS HABITAT NARRATIVE

Habitat description

Barren lands habitats are characterized by bare rock, gravel, sand, silt, clay or other earthen material, with little or no "green" vegetation present. Vegetation, if present, is more widely spaced and scrubby than that in the "green" vegetated categories; lichen cover may be extensive.

Problems affecting species and habitats

Species threats

The respondent cited no "critical threats" or "serious threats" to wildlife in barren lands habitat in Indiana. The respondent stated that the following are "somewhat of a threat" (not ranked):

- Unintentional take/direct mortality (e.g. vehicle collisions, power line collisions, by-catch, harvesting equipment, land preparation machinery)
- Unregulated collection pressure
- Habitat loss (breeding range)
- Habitat loss (feeding/foraging areas)

The respondent listed the following as "slight threat" (not ranked):

- Predators (native or domesticated)
- Dependence on irregular resources (cyclical annual variations) (e.g., food, water, habitat limited due to annual variations in availability)
- Large home range requirements
- Specialized reproductive behavior or low reproductive rates
- Degradation of movement/migration routes (overwintering habitats, nesting and staging sites)

The respondent listed no additional threats to wildlife in barren lands habitat in Indiana.

The respondent listed top threats to wildlife in barren lands habitat in Indiana: "The top two threats to the black kingsnake include human collection and habitat loss. How these factors affect kingsnake populations in Indiana is unknown"

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the threats to wildlife in all barren lands habitat. There were no responses.

Habitat threats

The respondent listed no "critical" or "serious threat" to barren lands habitat in Indiana. The respondent listed as "somewhat of a threat" (not ranked):

- Commercial or residential development (sprawl)
- Invasive/non-native species
- Nonpoint source pollution (sedimentation and nutrients)
- Habitat fragmentation
- Successional change

The respondent listed the following as "slight threat" to barren lands habitat in Indiana:

- Agricultural/forestry practices

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- Residual contamination (persistent toxins)

The respondent listed no other threats to barren lands habitat in Indiana.

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the threats to barren lands habitat. There were no responses.

Additional research and survey efforts

Current body of research

Species research

The respondent listed current body of science as inadequate for wildlife in barren lands habitat in Indiana.

Respondents identified the following citations (title, author, date, publisher) that would give the best overview of wildlife in barren lands habitats in Indiana.

Title = Amphibians and Reptiles of Indiana;
Author = Minton;
Date = 2001;
Publisher = Indiana Academy of Sciences.

Title = Snakes of the United States and Canada;
Author = Ernst and Ernst;
Date = 2003;
Publisher = Smithsonian Institution

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the current body of science for wildlife in all barren lands habitat. There were no responses.

Habitat research

The respondent listed current body of science as Unknown for barren lands habitat in Indiana.

Respondents did not identify citations (title, author, date, publisher) that would give the best overview of barren lands habitats in Indiana.

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the current body of science for barren lands habitat. There were no responses.

Research needs

Species research

The respondent listed no "urgently needed" or "greatly needed" research needs for wildlife in barren lands habitat in Indiana. The respondent listed the following research as "needed" (not ranked):

- Life cycle

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- Distribution and abundance
- Limiting factors (food, shelter, water, breeding sites)
- Threats (predators/competition, contamination)
- Relationship/dependence on specific habitats
- Population health (genetic and physical)

The respondent listed additional research needs for wildlife in barren lands habitat in Indiana: "I believe more information is needed for all topics concerning the black kingsnake in Indiana. However this species is not currently endangered and this information is not urgently needed."

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the research needs for wildlife in barren lands habitat. There were no responses

Habitat research

The respondent listed no research needs for barren lands habitat in Indiana.

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the research needs for barren lands habitat. There were no responses.

Conservation actions necessary

Species actions

The respondent stated that none of the listed conservation efforts address threats to wildlife in barren lands habitat "very well." The respondent stated the following efforts address threats "somewhat" (not ranked):

- Habitat protection
- Regulation of collecting
- Public education to reduce human disturbance

The respondent listed no other current conservation practices for wildlife in barren lands habitat in Indiana.

The respondent recommended the following practices for more effective conservation of wildlife in barren lands habitat in Indiana (not ranked):

- Habitat protection
- Collection regulation

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the conservation efforts for wildlife in barren lands habitat. There were no responses.

Habitat actions

The respondent did not know how listed conservation efforts address threats to barren lands habitat in Indiana or did not supply answers.

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The respondent listed no other conservation practices for barren lands habitat in Indiana, and recommended no specific practices for more effective conservation. Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the conservation efforts for barren lands habitat. There were no responses.

Proposed plans for monitoring

Current monitoring

Species monitoring

The respondent was aware of no current monitoring efforts by state agencies or other organizations for wildlife in barren lands habitat in Indiana.

The respondent listed no monitoring efforts by state agencies or other organizations as “very crucial” for conservation of wildlife in barren lands habitat in Indiana.

The respondent listed as “slightly crucial” the following efforts by agencies and organizations (not ranked):

- Periodic statewide (less than once a year but still regularly scheduled) monitoring
- Occasional statewide (less than once a year and not regularly scheduled) monitoring
- Periodic regional or local (less than once a year but still regularly scheduled) monitoring
- Occasional regional or local (less than once a year and not regularly scheduled) monitoring

The respondent was not aware of regional or local monitoring by state agencies or other organizations for wildlife in barren lands habitat in Indiana.

The respondent listed no current monitoring techniques for wildlife in barren lands habitat in Indiana that are “frequently used,” “occasionally used” or “not economically feasible.” The respondent indicated that the following monitoring techniques are “not used but possible with existing technology and data” (not ranked):

- Radio telemetry and tracking
- Modeling
- Coverboard routes
- Spot mapping
- Mark and recapture
- Professional survey/census
- Volunteer survey/census
- Trapping (by any technique)
- Representative sites
- Probabilistic sites

The respondent listed no other monitoring techniques for wildlife in barren lands habitat in Indiana.

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Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the monitoring techniques for wildlife in barren lands habitat. There were no responses.

Habitat inventory and assessment

The respondent was aware of no current inventory and assessment efforts by state agencies or other organizations for barren lands habitat in Indiana.

The respondent listed no inventory and assessment efforts by state agencies or other organizations as "crucial" for conservation of barren lands habitat in Indiana.

The respondent was not aware of regional or local inventory and assessment by state agencies or other organizations for barren lands habitat in Indiana.

The respondent did not rank the feasibility or use of current inventory and assessment techniques for barren lands habitat in Indiana.

The respondent was not aware of other inventory and assessment techniques for effective conservation of barren lands habitat in Indiana.

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the inventory and assessment techniques for effective conservation of barren lands habitat. There were no responses.

Recommended monitoring

Species monitoring

The respondent listed the following monitoring techniques for effective conservation of wildlife in barren lands habitat in Indiana: "Monitoring black kingsnakes through professional or volunteer survey would be the best for Indiana. This could be done through the use of representative sites or on volunteer chosen routes."

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the monitoring techniques for effective conservation of wildlife in barren lands habitat. There were no responses.

Habitat inventory and assessment

The respondent had no recommendations for inventory and assessment techniques for effective conservation of barren lands habitat in Indiana.

Technical experts and conservation organizations reviewed the above results and were asked if these were a reasonable representation of the inventory and assessment techniques for effective conservation of barren lands habitat. There were no responses.