

## Eastern Indigo Snake Protection Measures

It appears that harm to the eastern indigo snake occurs primarily through construction accidents, vehicular strikes, and habitat loss and/or degradation. These adverse effects can be minimized by maintaining a careful watch during construction and when traveling onsite to avoid killing snakes. In addition, protecting burrows and leaving native vegetation as refugia onsite for indigo snakes displaced by construction activity can benefit this species.

The eastern indigo snake is not likely to be adversely affected if the following measures are implemented for the project.

- 1) Burrows and onsite native vegetation should be protected. If such habitat must be disturbed, limit disturbance to a minimum and improve remaining habitat through exotic vegetation removal. Maintain native vegetation onsite as refuges for the snake.
- 2) Clearing and grading activities should be performed outside high activity months (June to November). Winter months (January to March) provide the best opportunity to initiate and complete construction activities that will not impact this species.
- 3) Post informational signs containing the following information throughout the construction site and along any proposed access road:
  - a) A description and picture of the eastern indigo snake, its habits, and protection under Federal Law;
  - b) Instructions not to injure, harass, or kill this species;
  - c) Directions to cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site on its own before resuming clearing; and,
  - d) Telephone numbers of pertinent agencies to be contacted if a dead eastern indigo snake is encountered.

Other useful educational materials may consist of a combination of posters, videos, pamphlets, and lectures (*e.g.*, an observer trained to identify eastern indigo snakes could instruct construction personnel before any clearing activities occur).

- 4) Monitor eastern indigo snake activity onsite. Report any eastern indigo snake observations that occur during project activities (see monitoring report below). Document with photograph, if possible. If large snake skins are found, they may belong to an eastern indigo snake. Skins can be collected and sent to the Service's South Florida Ecological Services Office (attention: Monroe County FEMA Biologist, U.S. Fish and Wildlife Service, South Florida Ecological Services Office, 1339 20th Street, Vero Beach, Florida 32960) for positive identification. Provide information on the date and location collected.

**Monitoring Report:** A monitoring report should contain the following information: location, dates, and times for any sightings of eastern indigo snakes. Also include the results any of burrow searches and observations. If a snake is encountered during a burrow search, then a description of the outcome for the snake is needed. Document by photograph, if possible. Was the snake left in an intact burrow? Was the burrow excavated? If so, did the snake leave and where did it go? A site map with sighting locations marked would be helpful. If an indigo snake is observed onsite a copy of the report is to be sent to the Service at the address listed above within 60 days of the conclusion of the project.

**Dead, injured, or sick animals:** If a dead, injured, or sick eastern indigo snake is found onsite, notification should be made to the Service at the address listed above. Secondary notification should be made to the Florida Fish and Wildlife Conservation Commission; South Region; 3900 Drane Field Road; Lakeland, FL 33811; Wildlife Alert Number 1-800-404-3922.

**Example Eastern indigo snake informational sign.**

***WATCH OUT FOR THE EASTERN INDIGO SNAKE***



The Eastern Indigo Snake is the largest nonpoisonous snake in North America, growing up to 8 feet in length. The color of both adults and young is shiny bluish-black with some red or cream coloring on the chin or sides of the head. The indigo snake is usually found in high, dry, well-drained sandy soils, but may also be found in hammocks, swamps, and flatwoods habitats in south Florida. Burrows are used by many prey animals that are easily captured by the indigo snake in the burrow. Indigo snakes also use the burrows as dens for cover, and laying eggs. Other

potential dens are stumps of trees, cavities in the soil, and under piles of debris.

The decline in the population of indigo snakes is attributed to habitat loss due to development and overcollecting for the pet trade. Fragmentation of habitat by roads results in many indigo snakes killed by vehicle traffic.

**Every effort should be undertaken to avoid harming any snake observed during work on this construction site. Any indigo snakes encountered during construction activity should be allowed to crawl off on its own before continuing construction activities. If it appears that the construction activities will cause harm to the snake, construction must be stopped until the proper action can be determined.**

These rare snakes are protected by the U.S. Endangered Species Act (ESA) of 1973 makes it a violation to “harass, harm, pursue, hunt, shoot, wound, kill, capture, or collect endangered or threatened species.” Violations can result in fines of up to \$20,000 and/or up to one year in prison. Only permitted personnel are allowed to handle the snakes.

Contact the following agencies if indigo snakes are observed:

**U.S. Fish and Wildlife Service 772-562-3909**

**Florida Fish and Wildlife Conservation Commission  
800-282-8002**