

# Dangerous Snakes of Niger, Africa



This guide was produced by the Department of Defense Partners in Amphibian and Reptile Conservation network (DoD PARC) to support expeditionary U.S. military personnel in Africa. Niger is inhabited by 12 species of potentially dangerous snakes (six of which are confined to the southernmost part of the country and thus do not occur anywhere in the north), as described below. If you encounter a snake, do not try to capture, kill, or play with it; most accidents occur while snakes are being unnecessarily disturbed, and most snakes encountered in the field are not dangerous.

### **Snakebite Prevention**

Most snakes are inherently shy and will avoid contact with humans. However, when cornered or disturbed, many snakes can become aggressive. Taking a few simple precautionary measures will greatly decrease the likelihood of being bitten. Specific recommendations include, but are not limited to the following:

- 1) Be careful where you place your hands or feet, particularly among rocks, bushes, and other sources of cover where snakes may be hiding.
- 2) Do not attempt to closely observe or pick up snakes (including dead ones), as most bites result from this risky behavior.
- 3) Wear long pants, leather boots, and leather gloves while walking or working outdoors.
- 4) Wear footwear and use a flashlight (if tactically appropriate) when moving about at night (e.g. when going to the latrine) as many snake species are nocturnal.
- 5) When encountering a snake, back away and do not threaten it.

### **Initial Medical Treatment**

- 1) Try to keep the patient calm.
- 2) Gently wipe the bite wound to remove surface venom, but DO NOT massage the wound.
- 3) Cover the wound with a mildly compressive bandage. Do not apply strong pressure to the wound.
- 4) Immobilize a bitten limb with a splint. Additionally, if the wound is on an upper extremity, use a sling for further immobilization. Avoid movement of the bitten limb as this may result in muscular contraction that will promote systemic absorption of venom.
- 5) In the case of snake venom in the eyes, irrigate the eyes and other mucous membranes as soon as possible with a large volume of water or saline.
- 6) Do not do any of the following manipulations to the bite wound: cauterization, incision, excision, amputation, suction by mouth or vacuum pump, injection or instillation of compounds, application of ice, or drinking alcohol.





If a snakebite occurs, and it is uncertain whether the snake is venomous or non-venomous, attempt to safely take a photo of the snake (e.g., staying outside its strike range – a minimum of five feet should suffice) and promptly send it to a wildlife expert for identification. An attempt to kill the snake should only be made as a last resort; doing so poses additional safety risks. If a reliable identification of the snake cannot be immediately made, then the snakebite victim should be rushed to the nearest medical facility as a precaution.

### Watson's Burrowing Asp (Atractaspis watsoni)

<u>Description</u>: Entire coloration could be black, dark purple, gray, or brown (somewhat lighter on the underside). Relatively thick body, with blunt head and inconspicuous small dark eyes. Reaches a total length of 3-4 feet.

<u>Habits</u>: Inhabits the savannas and grasslands of extreme southern Niger. Relatively common, but usually underground or under surface cover, and normally active only at night, and thus rarely seen. Although non-descript and seemingly harmless-looking in appearance, it is highly aggressive if restrained, and capable of rotating its long fangs at various angles and thus cannot be safely handled. Envenomation is potentially serious, causing pain, swelling, and sometimes necrosis, and may be fatal to humans.

Burrowing Asp photograph by S. Spawls (top) and L. Chirio (bottom)





# **Puff Adder** (Bitis arietans)

<u>Description</u>: Background coloration is a light to medium shade of grayish-brown, with darker wavy crossbands or chevrons, and an upper and lower lateral row of lighter spots and streaks. Large head and very thick body, but with very short and thin tail. Reaches a total length of approximately 5 feet.

Habits: Inhabits the savannas and grasslands of extreme southern Niger. Relatively common, but frequently overlooked due to its sedentary habits, preference for thick vegetation, and camouflaged color pattern. Very slow-moving and incapable of readily vacating an area from which it perceives a potential threat. Thus, while it will usually try to avoid detection by remaining motionless and hidden, when it is disturbed, it will become highly defensive by increasing its apparent body size by inhaling air, and making a highly audible hiss by exhaling air. Envenomation is usually serious, causing intense pain, swelling, and potentially extensive necrosis, and may be fatal to humans.

### Puff Adder photographs by L. Chirio (top) and K. Mebert (bottom)









# **Spotted Night Adder** (Causus maculatus)

**Description**: Background coloration is a light shade of yellow, gray, or brown, with a dorsal and lateral row of blackish-brown spots and/or narrow crossbands that are bordered with lighter colors. Relatively thick body, with blunt head and large eyes with round pupils. Reaches a total length of approximately 2 feet.

<u>Habits</u>: Inhabits the savannas and grasslands of extreme southern Niger. Relatively common, and contrary to its name, is frequently active during the day in the rainy season, when it searches moist areas for its amphibian prey. Relatively slow-moving and thus, when it is disturbed and incapable of readily escaping, it will become defensive by increasing its apparent body size by inhaling air, and making a highly audible hiss by exhaling air. Envenomation causes mild symptoms such as pain, swelling, and fever that usually subsides within a few days, and is not known to have caused human fatalities.

# Spotted Night Adder photographs by L. Chirio (top right); and K. Mebert (top left and bottom)









### **Desert Horned Viper** (*Cerastes cerastes*)

**Description**: Background coloration is a light to medium shade of yellow, gray, brown, or red, with or without a dorsal and lateral row of blackish-brown spots. Relatively thick body, with large head and highly elevated scales directly above the eyes. Reaches a total length of 2-3 feet.

<u>Habits</u>: Inhabits the deserts of the northern half of Niger. Occupies sandy patches in association with stones, shrubs, and/or grasses, while avoiding featureless sand dunes. Usually avoids detection while awaiting its prey of lizards and rodents by lying under the sand with only the top of the head exposed. When disturbed, it may increase its apparent body size by inhaling air, making an audible hiss by exhaling air, or making a rustling sound by rubbing its keeled scales together. Envenomation causes mild symptoms such as pain, swelling, and fever that usually subside within a few days, and is not known to have caused human fatalities.

### Desert Horned Viper photographs by K. Mebert









# Sahara Sand Viper (Cerastes vipera)

**Description:** Background coloration is a light shade of yellow, gray, or brown, with or without a dorsal and lateral row of darker brown spots. Relatively thick body with large head, but unlike the closely related desert horned viper, no elevated scales above the eyes. Reaches a total length of 1-2 feet.

Habits: Inhabits the deserts of the northern quarter of Niger. Occupies sand dunes with a scarcity of stones, shrubs, grasses, or other physical features. Usually avoids detection while awaiting its prey of lizards and rodents by lying under the sand with only the top of the head exposed. When disturbed, it may increase its apparent body size by inhaling air, making an audible hiss by exhaling air, or making a rustling sound by rubbing its keeled scales together. Envenomation causes mild symptoms such as pain, swelling, and fever that usually subside within a few days, and is not known to have caused human fatalities.

#### Sahara Sand Viper photographs by K. Mebert











# Saw-scaled Vipers (Echis leucogaster and Echis romani)

**Description:** Background coloration is a light shade of brown on the sides, and a darker shade on the back, with a dorsal row of white spots or narrow crossbands and an upper lateral row of dark brown spots outlined in white. Relatively thick body with a blunt snout and stout head. Reaches a total length of 1-2 feet.

<u>Habits</u>: Inhabits the deserts of central Niger (*E. leucogaster*) or savannas, grasslands, and semi-deserts of southern Niger (*E. romani*). Commonly occurs in drier areas with cover such as stones and human debris near villages, where it frequently comes into contact with people, while avoiding sandy areas. When disturbed, it becomes highly aggressive and makes a highly audible rustling sound by rubbing its keeled scales together. Envenomation is very common and frequently serious, causing pain, swelling, and sometimes necrosis, and is responsible for the most human fatalities by all snakes in Niger.

# Saw-scaled Viper top photograph of *E. leucogaster* by L. Chirio; bottom photograph of *E. romani* by S. Spawls





# Egyptian Cobra (Naja haje)

**Description**: Background coloration ranges from various shades of yellow, brown, and gray, to nearly black, with darker, indistinct markings throughout the body, including the head and back of the neck that can be laterally distended into a vaguely patterned broad "hood" when disturbed. Older individuals gradually become darker and may be entirely black with few to no apparent markings. Reaches a total length of 5-7 feet.

<u>Habits</u>: Inhabits the savannas, grasslands, and semi-deserts of southern Niger. Commonly occurs in moist areas with grasses, bushes, and other plants, and frequently attracted to villages in search of rodents and other potential prey. Although it will attempt to escape when given the opportunity, it will readily defend itself if unable to do so by raising its fore—body and spreading its hood. Envenomation is usually serious, causing neurological and respiratory failure (albeit usually with little pain), and may be fatal to humans.

### Egyptian Cobra photographs by L. Chirio





# Spitting Cobras (Naja nigricollis and Naja nubiae)

<u>Description</u>: Entire coloration is a patternless black or blackish-gray (Black-necked Spitting Cobra), or brown or brownish-gray (Nubian Spitting Cobra), variably and discontinuously marked in whitish, yellowish, or reddish on parts of the underside in both species, including the head and back of the neck that can be laterally distended into a patternless "hood" when disturbed. Reaches a total length of 5-7 feet (*N. nigricollis*) or 4-5 feet (*N. nubiae*).

**Habits**: Inhabits the savannas and grasslands of extreme southern Niger (*N. nigricollis*), and Air Mountains in north-central Niger (*N. nubiae*). Commonly occurs in moist areas with grasses, bushes, and other plants, and frequently attracted to villages in search of rodents and other potential prey. Although it will attempt to escape when given the opportunity, it will readily defend itself if unable to do so by raising its forebody and spreading its hood, as well as "spitting" venom towards the eyes of its adversary. Envenomation is usually serious, causing neurological and respiratory failure (albeit usually with little pain), and may be fatal to humans. Moreover, venom that is spat into the eyes causes temporary, and occasionally permanent, blindness.

### Black-necked Spitting Cobra (N. nigricollis) photographs by L. Chirio





Nubian Spitting Cobra (N. nubiae) photographs by R. Ciuros







### West African Banded Cobra (Naja savannula)

<u>Description</u>: Background coloration is blackish, with wide, but rather indistinct, light yellowish bands that darken towards the posterior of the body, and with a dark back of the head and neck that can be laterally distended into a narrow "hood" when disturbed. Reaches a total length of 5-7 feet.

<u>Habits</u>: Inhabits the savannas and grasslands of extreme southern Niger. Commonly occurs in moist areas with grasses, bushes, and other plants, especially near sources of water, where it hides and searches for its amphibian prey. It will readily attempt to escape when given the opportunity, and is relatively docile compared to most other cobras, and thus snakebites are rare. However, it may still defend itself by raising its fore—body and spreading its relatively narrow hood. Envenomation is usually serious, causing neurological and respiratory failure (albeit usually with little pain), and may be fatal to humans.

### West African Banded Cobra photographs by L.Chirio





# Senegalese Cobra (Naja senegalensis)

<u>Description</u>: Background coloration ranges from various shades of brown to gray, with smaller, darker, indistinct markings, and typically with a darker head and back of the neck with bold white markings that can be laterally distended into a broad "hood" when disturbed. Older individuals gradually become darker and may be entirely near-black with no apparent markings. Reaches a total length of 5-7 feet.

<u>Habits</u>: Inhabits the savannas and grasslands of extreme southern Niger. Commonly occurs in moist areas with grasses, bushes, and other plants, and is frequently attracted to villages in search of rodents and other potential prey. Although it will attempt to escape when given the opportunity, it will readily defend itself if unable to do so by raising its fore—body and spreading its hood. Envenomation is usually serious, causing neurological and respiratory failure (albeit usually with little pain), and may be fatal to humans.

### Senegalese Cobra photographs by L. Chirio





# **Central African Rock Python** (*Python sebae*)

**Description**: Background coloration is a light shade of brown, with a dorsal and lateral row of large, irregularly-shaped, blackish-brown blotches usually outlined in black and occasionally in white or yellow. Occasionally the rows of blotches are interconnected. Massive body that reaches a total length of 15-20 feet, although hatchlings are only about 2 feet long, and thus individual specimens vary widely in length.

Habits: Inhabits the savannas and grasslands of extreme southern Niger. Common in moist areas with grasses, bushes, and other plants, especially near sources of water, where it hides and searches for prey. Although it will attempt to escape when given the opportunity, it is slow-moving and will readily defend itself if unable to do so by striking repeatedly at, and attempting to constrict, its adversary, which may cause serious injuries. Although non-venomous, it is has been known to cause a few human fatalities while defending itself, and on rare occasions, large individuals have been documented preying upon humans.

### African Rock Python photographs by L. Chirio

