

The Buzz

Advocates *for* Snake Preservation



Changing how people view & treat snakes

Summer 2020 • #04

Happy World Snake Day!

July 16 is World Snake Day: an opportunity to celebrate snakes and raise awareness about their conservation. While snakes are threatened by many of the same issues that affect all wildlife (habitat loss, climate change, and disease), negative attitudes toward snakes may be the biggest barrier to their conservation because it often impedes efforts to address other threats.

We encourage everyone to use this day to share positive stories about snakes with their friends and families. Need some inspiration? We've got you covered.

Rattlesnake fights are rarely lethal, but always beautiful.



Jaydin fights Marty over Persephone (Black-tailed Rattlesnakes).

Rattlesnake combat is an elaborate wrestling match, where each snake tries to topple the other. They rarely bite during combat and there is little rattling. In fact, the contest can be so tranquil that it is often mistaken for courtship between a male and female.

Rattlesnakes take care of their kids. Sometimes their friends' kids too.



Adrian, pregnant Arizona Black Rattlesnake, babysitting a nestmate's kids.

Rattlesnake babies are born alive and stay with mom a week or two until they shed their skin. Mom keeps them safe during this vulnerable time. At communal nests, pregnant rattlesnakes and visiting males may babysit the babies too.

Some snakes are social.

Indeed they are, as are many other reptiles and their social behavior is more like birds and mammals than many guess! We found that Arizona Black Rattlesnakes have friends and individuals they avoid within their community. For more on this topic, check out "Secret Societies: The Social Lives of Reptiles," by Gordon Burghardt, on the next page.



Arizona Black Rattlesnake social group drinking together.

Secret Societies: The Social Lives of Reptiles

Sociality in reptiles, particularly snakes, has been long misunderstood and even denied. Today it is well-established that many crocodylians have complex courtship rituals and parental care that is far more extensive than that found in many birds and mammals. Cooperative hunting has even been described. Turtles develop dominance relationships and recently it has been discovered that many have social vocalizations, particularly aquatic species. One South American river turtle is truly amazing. Mothers migrate up the river over a hundred miles to lay their eggs in large communal nesting aggregations and then depart downriver. When the eggs are about to hatch the mothers return to the nesting beaches, the hatchlings and mothers vocalize to each other, the hatchlings move into the river, and then the hatchlings follow the mothers back downstream. Whether this is just a communal response or mothers and hatchlings recognize each other is still not known, but this is one of the major recent discoveries showing how much is still unknown about reptile behavior and the endless opportunities for major discoveries.

Lizards have been known for decades to have territorial systems as well as dominance hierarchies, though there is great variation in sociality, even within closely related groups.

Parental care is also present, especially in skinks and many also guard their eggs. And some skinks have long-term monogamy and family ties that span generations. There is even evidence of kin-based altruism in green iguanas. The colorful markings, dewlaps, and crests are used in social communication along with head-bobbing and other behavior.

Snakes have long been considered solitary except for seasonal mating rituals. In a number of species, mating aggregations are large and dramatic.



Cunningham's Skink family, photographed by Julia Riley.



Arizona Black Rattlesnake family.

Territorial and dominance relationships in wild snakes is seemingly uncommon, but does occur and is probably more common than we think. Snakes, all being obligate carnivores, and most relying on large prey, compared to insectivorous lizards, are often at low densities in the wild and thus their social relationships not easily recognized or studied. Yet studies show that many species go to seasonal hibernacula to brumate over winter and individuals have preferred partners for resting and basking – even perhaps, friendships. Recent laboratory studies with Common Gartersnakes show that juvenile snakes develop social partners as well. A number of species of snakes stay with their eggs and defend them. Mother rattlesnakes, who give live birth, are known for staying with their offspring for days and there are even reports of males defending females and offspring from predators. Snakes often compete for food in captivity and this can lead to social preferences or avoidance. Some male pit vipers have dramatic wrestling matches, often to impress nearby lurking female with whom they want to mate. We are just on the cusp of finding out how social snakes can be. It is important, of course, to view snakes from their sensory and perceptual worlds, and not ours. Thus, for most snakes and many lizards, chemical cues are more important than visual and auditory cues, but these we cannot personally perceive ourselves and thus are prone to ignore. The secret lives of snakes are still largely secret.

- *Gordon M. Burghardt, PhD, Board of Directors, ASP*

References available at: snakes.ngo/reptile-sociality

We Envision a World Where ALL are Respected and Appreciated Instead of Feared and Hated.

The last few months, and dual pandemics, have been personally and professionally challenging. We trust science, so how to handle COVID-19 has been pretty straight-forward: online events only, more hand-washing, wear masks, etc. Our role in fighting systemic racism has been less clear. What is clear is that staying silent and doing nothing is not an option.

Until all humans are treated with respect, our mission cannot be realized. The mindset of those who persecute snakes, and the culture that condones it, come from the same place as systemic racism: fear and hatred, especially of those perceived to be different. Thus, **we support all who promote compassion and oppose fear and hate.** While we continue our advocacy for snakes, we're listening and learning for ways we can support the fight to end systemic racism.

Melissa Annarello

Executive Director, ASP



Melissa admires a pink Coachwhip.



Gophersnake.

Colorful Coachwhips



A courting pair of Coachwhips

Coachwhips come in a variety of colors: black, pink, and everything in between. Color doesn't indicate sex and multiple color morphs can coexist in some places.



Be a Snake Hero!

Snakes deserve a voice and together we give them one. **Your gift brings us closer to a world where snakes are respected and appreciated instead of feared and hated.**

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Gophersnake.

Advocates *for* Snake Preservation

*uses science, education,
and advocacy to promote
compassionate conservation
and coexistence with snakes.*

Who We Are

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#SnakeHero

In his video, conservationist, ecologist, and #SnakeHero, Sebastian Harris, explains what to do if you encounter a rattlesnake while hiking.

**“Walk around them
and enjoy the rest
of your day.
It's that simple.”**

Find out more about
Sebastian and his work
with snakes and other
wildlife on his website:
SebastianAronH.com

 Sebastian A. Harris
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Yesterday I had an encounter with a Timber Rattlesnake that I thought might make a good teaching moment. Venomous snakes, particularly in the US, are only dangerous if you threaten their wellbeing. We can coexist. Hopefully this video captures that.
youtu.be/-ynvpo56kxw



Pinned at twitter.com/sebastianaronh

View and share our new **Snake Country Travel Guide** for more information on hiking, biking, climbing, and camping safely in snake country: LivingWithSnakes.org/travel