



# JR

## ANIMAL SCIENTIST

JULY 2021



# Animal Companions



# When animals work together

Humans have lived alongside animals for thousands of years. We love our pets and take care of our livestock. We play with them and work with them.

But did you know that animals in nature also work together? There are many cases of **symbiotic** relationships, where two species of animals help each other survive. There are also cases where animals form a kind of team, called **mutualism**, to help each other find food.

Are these animal friends? Are they companions? It's hard to describe animals in human terms, but we do know that by working together, these species have survived better than they ever could alone.



**Black rhinoceroses and cattleback egrets have a mutualistic relationship. The egrets get to eat bugs disturbed when the rhino is eating grass. In return, the rhino is helped by the egrets eating parasitic bugs that could make it sick.**



# WORD WATCH

## Look for these terms in this issue of *Jr. Animal Scientist*:

When an animal relies on another animal, that is called a **symbiotic** relationship. This is pronounced “sim-buy-aw-tick.” There are three main types of symbiotic relationships:

**Mutualism:** When two species of animal “work together” so that they both benefit.

**Commensal:** When one species benefits from working with another species, while the second species is not helped or hurt by the relationship.

**Parasitic:** When a species needs to harm another species to survive. The attacking species survives and the host species is harmed.

## FUN FACT:

Animals and plants can form symbiotic relationships as well. In the insect world, flowers need pollinators such as bees to survive and make seeds. Meanwhile, bees need the nectar from flowers to make honey and feed their hive.



# Types of symbiotic relationships

## Mutualism

It's actually pretty common for animals to work together! One great example is how coyotes and badgers work together to hunt. There have been many cases where coyotes and badgers have been seen hunting the same prey—and they seem to work as a team.

The **mutualistic** relationship works because each species has a special skill. Badgers are good diggers, so they can uncover prey animals living underground. Coyotes are fast, so they can chase prey to catch it. By combining their skills, these species can get more food!

American badgers are good diggers, but they are not fast! They can hunt more prey if they work with fast coyotes.





## Commensalism

Some animal relationships are **commensal**, they help one animal but don't help or hurt the other species. One great example is bird calls! Scientists have found that some squirrels have learned to listen to loud bird calls to warn them of approaching predators. In this case, the squirrels rely on the "alarm" sounds the birds make to each other. The squirrels don't help the birds in return.

**Crows are good at alerting other animals of danger nearby! Their loud calls can warn of owls, hawks and other threats.**



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Photo: iStock / Thom\_Morris

**The tarantula hawk wasp is the state insect of New Mexico!**

## Parasitism

Not all animals play well with others. **Parasites** are animals that rely on another species to survive. They exploit the other species and harm it. The tarantula hawk wasp is a large wasp that lives around the world. When a female wasp is ready to lay eggs, she will catch a tarantula and paralyze it with her powerful stinger. She will then drag the motionless tarantula to a small burrow and lay a single egg on it.

When the egg hatches, the wasp larva will devour the still-alive tarantula. Thanks to parasitism, the wasp has a full meal to eat. The wasp species thrives at the expense of the tarantulas.



# Animal companions in zoos!

Animal scientists and animal behavior experts have found that some wild animals do better in zoos if they are given companions. For example, cheetahs are known for being shy and skittish in zoos. People make them nervous.

To help cheetahs stay calm, many zoos house cheetahs with dogs! The cheetahs don't hurt the dogs. In fact, a full-grown cheetah and a Labrador Retriever dog are about the same size. This arrangement works best if the cheetahs and the dogs are raised together as cubs and puppies.

Dogs help the cheetahs by playing and running with them, which helps the cheetahs release nervous energy. Dogs are also more calm around humans. Seeing this calm behavior can reassure the cheetah that they are safe in the zoo.

Zookeepers have also tried housing capuchin monkeys and squirrel monkeys together. These two species of small monkeys share habitat in the wild. By keeping them in the same zoo enclosure (and giving them enough space to share), zoos have found that the two species can enrich each other's lives. Housing them together is a great way to replicate the playful interactions they have in the wild.



## ACTIVITY:

# A look around the meadow!

Let's pretend we're visiting a cattle pasture! The sun is shining and the birds are chirping. Which animals can you find in this habitat?



Word Search: Words can share letters as they cross over each other.

Words can go in any direction.

D	E	R	R	T	I	R	E	E	C	O	W	H	R
O	K	W	L	U	G	K	N	U	M	P	I	H	C
A	O	O	E	L	I	Z	A	R	D	F	L	A	C
B	A	R	R	K	C	A	N	R	G	M	K	H	O
U	E	C	A	H	O	P	F	P	R	O	R	G	X
T	R	I	R	G	R	U	O	I	A	U	A	I	O
T	B	C	K	L	P	I	X	K	S	S	B	O	M
E	S	Q	U	I	R	R	E	L	S	E	B	I	S
R	R	C	G	O	P	H	E	R	H	F	I	E	K
F	F	C	U	F	R	N	U	K	O	O	T	A	U
L	S	W	N	E	O	R	E	L	P	P	S	P	N
Y	E	I	E	S	B	S	P	E	P	S	R	T	K
Y	G	B	R	H	I	S	E	O	E	B	U	F	B
H	P	E	G	B	N	F	E	R	R	P	E	B	P

**Gopher**  
**Fox**  
**Calf**  
**Grasshopper**  
**Cow**  
**Crow**  
**Rabbits**  
**Butterfly**  
**Robin**  
**Chipmunk**  
**Skunk**  
**Mouse**  
**Squirrel**  
**Bee**  
**Lizard**



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