

Safety In Numbers
by Sarah Wassner Flynn



What do you notice in this photograph of Emperor penguins?

Brrrr! The average winter temperature at the South Pole, the southernmost point on Earth, is about -56.2°F (-49°C). That's much colder than the temperature in your freezer! So how do the animals there keep from turning into popsicles? Simple! They stick together.

Staying Toasty

On those freezing days, it is not usual to see groups of Emperor penguins huddling together in large groups. What are they doing? These penguins are getting as close as they can to keep warm and safe. Think about being outside on a cold day. If you huddle together with your friends, you will feel warmer. The same goes for animals. The closer you are, the more body heat you **conserve**, or save. In cold climates, animals like penguins gather together in tight groups to share body heat and stay sheltered from the wind. In fact, the penguins' behavior is so effective that the temperature can rise to nearly 100°F (37.5°C) at the center of the huddle. That's downright hot!

As humans, we conserve body heat by doing things like wearing a jacket or curling up under a blanket. We can also turn up the heat in our house or in our car. Animals--especially those living in the wild--cannot do that. So they have **adapted** to stay warm in different ways. One of these ways is to form a huddle, like the penguins. If they didn't do this, they would have a harder time surviving in their harsh environment.

Did You Know?



Emperor penguins take turns being on the outside and inside of the group.

Those on the outside get cold and move to the inside to get warm.

Those on the inside get hot and move to the outside to cool off!



Impalas may form herds of 50 or more.

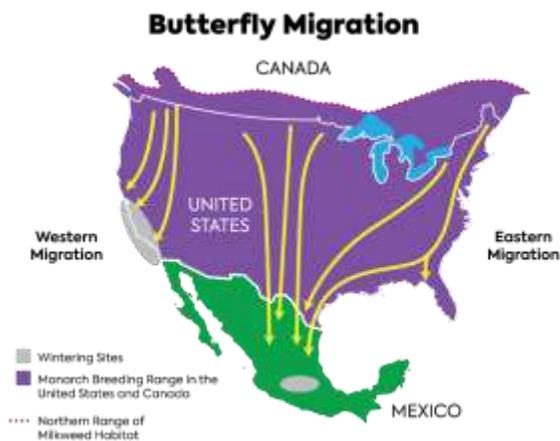
grouped together, it's more of a challenge. The impalas can spread out in many different directions, which can confuse the lion. The group tactics also enable the bigger impalas to protect the younger ones. Forming a group for safety is another type of adaptation. It helps impalas survive.

Traveling Together

Every year, the colorful Monarch butterflies fly to California and Mexico. Butterflies cannot **survive** in cold weather, so they head south where it is warm. As they travel, the butterflies will **roost**, or gather together, in a giant group when it is time to rest. Similar to the penguins, this behavior keeps them safe from the chilly air. It is warmer when they are all together. Just like the impalas, the roosting behavior also makes them less **vulnerable** to predators.



Thousands of Monarch butterflies roost together.



Get In the Group

As humans, we choose to stay near other people for different reasons. Maybe you stay close to your parents in crowded places so you don't get lost. Or you might like to stick by your friends because they make you laugh. For some animals, however, staying in a group is not really a choice. It is the only way they can survive in the wild.