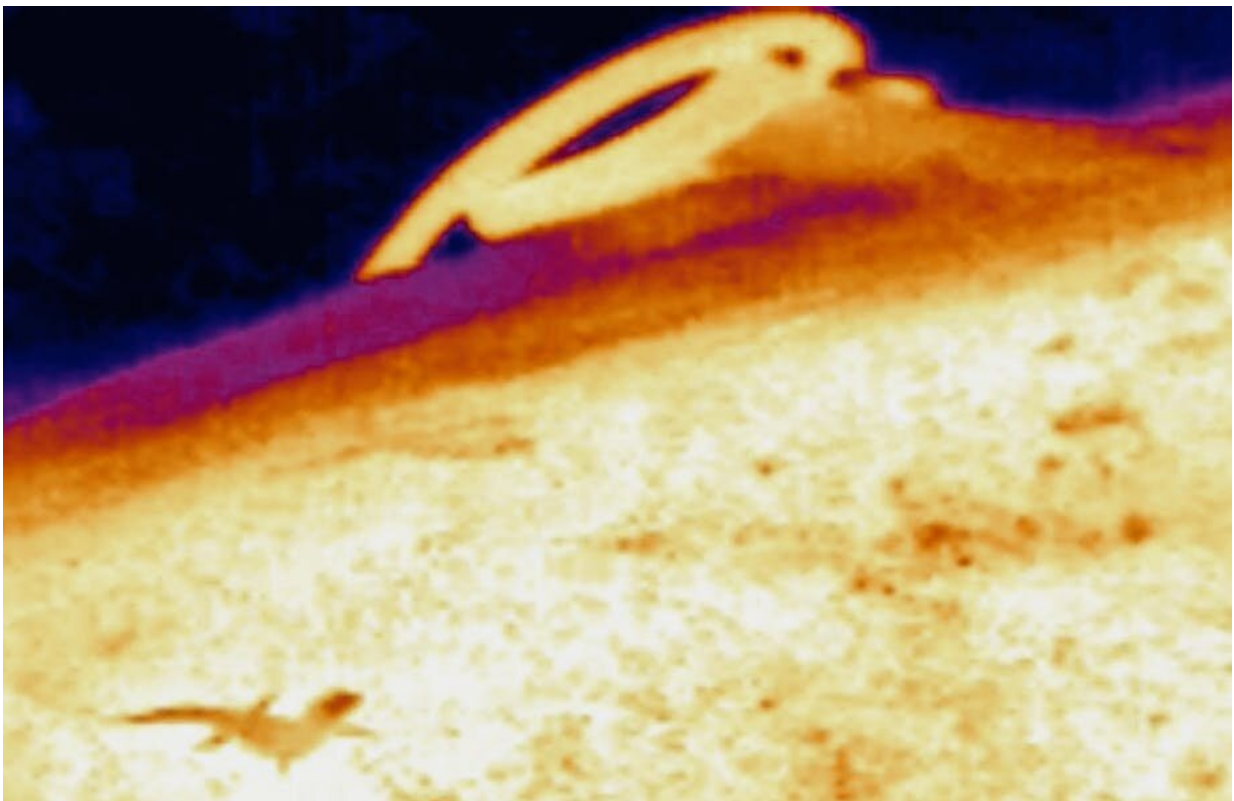


Scientists capture rare footage of mother skink fighting a deadly brown snake to protect her babies

September 3 2020, by Gregory Watson, Jolanta Watson



Credit: Gregory Watson and Jolanta Watson

Unlike many mammals and birds, most reptiles show little sign of being caring parents. But our new research shows one lizard species may be

more doting parents than we thought—the adults risking their own safety to protect their babies.

We used cameras in the Snowy Mountains of New South Wales to study the Cunningham's skink. We were surprised to record evidence of the lizards actively defending their newborn offspring against formidable predators. Our findings are outlined in a [paper](#) released today.

Most startlingly, we recorded a mother skink aggressively attacking a large, deadly brown [snake](#) while her babies watched on. We also witnessed 12 incidents of skinks chasing magpies away from their young.

We originally set out to record how species such as skinks will cope with climate change. But this evolved into a study of the fascinating and surprising social bonds between lizard offspring and their parents.

What is the Cunningham's skink?

The Cunningham's skink (*Egernia cunninghami*) is a large, sun-loving, spiny lizard native to southeast Australia. It's [named after](#) Alan Cunningham, an explorer who collected the first specimen in the Blue Mountains.

The skinks are active during the day. They feed on a variety of invertebrates such as insects, snails and slugs, as well as vegetation.



Sun-loving skinks live together in social groups. Credit: Gregory Watson and Jolanta Watson

The Cunningham's skink lives in [social groups](#)—a behavior very rare among lizards and reptiles. In these groups, mothers give birth to live young (rather than eggs) then live alongside their kids, sometimes for several years.

The species has strength in numbers—living in a group makes it easier to spot threats, which helps the group survive.

The mother of all discoveries

Using video and [thermal imaging](#), we observed the skinks on 32 days

over three years.

Among reptiles, evidence of parental protection in their natural environment has been rare and typically anecdotal. We witnessed four birthing sessions, and then monitored skink encounters in the presence of their offspring.

Videoing nature can be tricky. Often, the action takes place away from where you've directed your camera. So when we saw a snake, it was a scramble to get a free video camera and start recording.

We witnessed two separate encounters with an eastern brown snake. The first involved the snake sneaking up on six-day-old skinks basking in the sun (see footage below). We recorded the mother running towards the predator and biting it for several seconds. The snake writhes around before the mother releases her grip and returns unharmed to her young.

The following year, we encountered two adult skinks attacking another eastern brown snake in bushes. Juvenile skinks were nearby. The skinks bit tight to the snake's body, and the snake dragged them for more than 15 meters before the skinks released their grip.

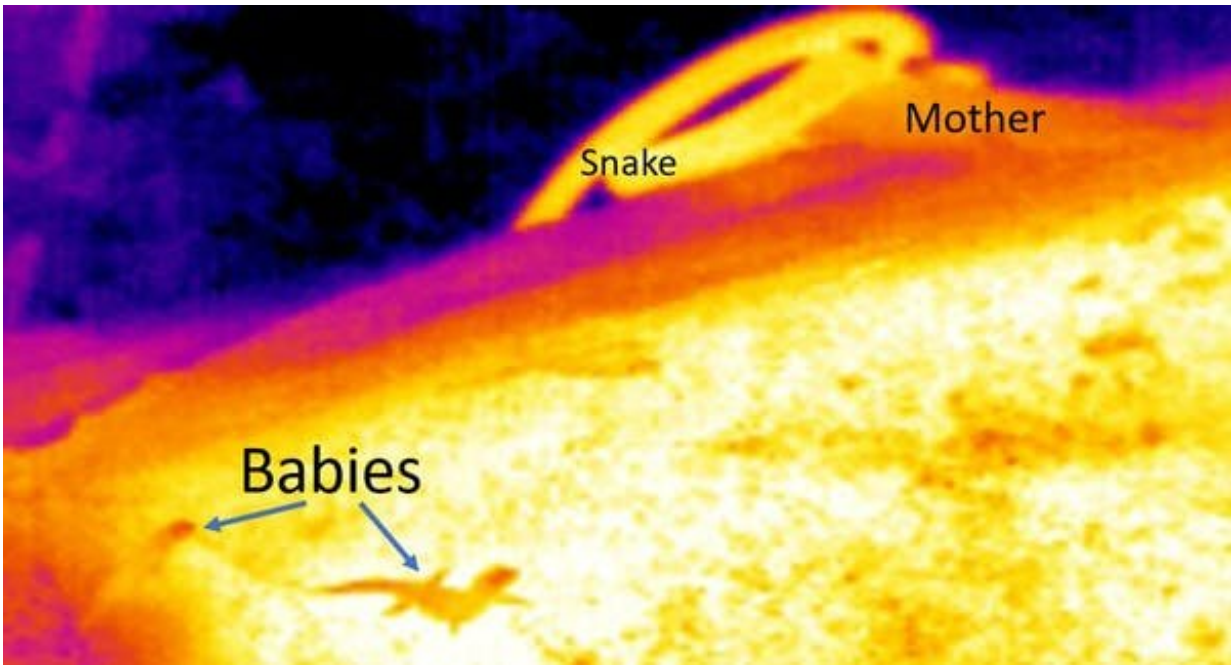
Snakes were not the only predator vanquished by the protective skink parents—Cunningham's skinks regularly chased magpies away from their young. We observed 12 encounters between skinks and magpies. In each case, an adult skink aggressively chased and/or attacked the magpie after the bird came close to the group.

What does this all mean?

Some animals rarely interact with others of the same species, even their offspring. In fact, available data suggests infanticide—where mature animals kill young offspring of the same species—can occur among

some skink species.

We saw no such behavior among the Cunningham's skink, or aggression towards each other.



Thermal camera image showing the mother skink attacking the snake while her babies watch. Credit: Gregory Watson and Jolanta Watson

While the aggression of the adult skinks towards predators took place in the presence of young, the adults may have been exhibiting self-defense or territorial behavior. Regardless, the attacks on predators in the presence of newborns does reflect parental care, either directly or indirectly. Our future field excursions will hopefully shed more light on this.

Understanding the factors that bring parents and offspring together, and

keep them together, is important in our broader understanding of [social evolution](#) – that is, how social interactions of [species](#) arise, change and are maintained.

It will also help us understand how animals cooperating with and caring for each other can benefit both the individual, and the whole.

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Provided by The Conversation

Citation: Scientists capture rare footage of mother skink fighting a deadly brown snake to protect her babies (2020, September 3) retrieved 20 June 2024 from <https://phys.org/news/2020-09-scientists-capture-rare-footage-mother.html>

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