THE STORY OF LIFE ON EARTH





BEN GARRED BY GABRIEL UGUETO



CLIMATE CHANGE

This has been a major factor in every previous mass extinction in some way, shape or form. Climate changes all the time in cycles, enabling us to look back and assess how these changes occur and by how much the climate changes. Although the climate across the globe is currently changing, through increased rain and flooding in some areas and increased droughts and fires in others, temperature increases are a good way to establish how things are changing.

I looked at temperatures across the planet today, as I was writing, to make sure my content is as accurate and as recent as possible, and what I discovered shocked me. Last week, forest fires raged across Canada, as temperatures there reached a scorching 49.6°C. Similar temperatures, of around 48°C, have been experienced in Siberia in Russia, in a heatwave that has lasted for weeks. These temperatures in Canada and Russia both fall within the

Arctic Circle, an area known for its fragile cold habitats. Although the Arctic is rapidly heating, the story is the same for the southern pole. Last year, Antarctica observed a new record high temperature of 18.3°C, which is responsible for the rapid loss of sea ice.

Today saw a new record set. In Death Valley in North America, the temperature reached 54.4°C, and although Death Valley is well known for being a hot and inhospitable place, this is the highest reliably recorded temperature ever anywhere on the planet. Climate change is a big factor for previous mass extinctions, and we'll talk about it later in the book. Not because there isn't much to say, but because there's *so much* to say regarding climate change and the mass extinction we're facing.





BEHAVIOUR > *

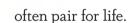
The Hainan gibbon is a social animal, a characteristic shared by all other gibbons and, to a greater or lesser extent, by all other primates.

It is fiercely territorial, but unlike many territorial animals it chooses not to fight but instead display to one another and *sing* to its competitors. The vocal display can be heard from up to a kilometre away and is formed by a two-part song between a male and female. If there are any young animals in the group, they may also join in with the calling. Each gibbon species has a unique song, which helps identify them, but scientists are also able to use these calls to help locate different family groups within a forest habitat. Hainan gibbons also sing their duets for mating and bonding between couples.

The song starts in the early morning, with periods of singing lasting for five to 20 minutes. Early morning songs help reinforce the bond between a male and female, as well as warning any other gibbons within earshot that this is *their* territory.

A gibbon family group, which consists of one adult male and up to two adult females, defends a territory typically around 1.49 square kilometres in size. Each female gives birth to a single offspring every two years. If there are two females in the same family, they alternate the births, resulting in one newborn a year for the family group.

Baby Hainan gibbons remain almost constantly attached to their mothers for the first eight or nine months of their lives. When they reach about two years old, they can move about on their own to explore, feed and play, and they eventually leave their family group when they reach maturity, at between five and eight years old, so they can join another family, or start their own family.



Gibbon males and females

