# RACHEL CARSON CENTER FOR ENVIRONMENT AND SOCIETY INTRODUCTION TO ENVIRONMENTAL ANTHROPOLOGY DR. MONICA VASILE

# Equality beyond mankind

Why we should focus on Jane Goodall's reasons for hope.

27.03.2020

WRITTEN BY LAURA LINDNER

MAIL: KONTAKT@LAURA-LINDNER.DE

## **Equality beyond mankind**

# Why we should focus on Jane Goodall's reasons for hope.



Picture: Getty Images

"The least I can do is speak out for those who cannot speak for themselves." – Jane Goodall

Abstract: This text tells the story from the perspective of a growing chimpanzee male named Koba, who meets the behavioral scientist Jane Goodall on his daily forays through the rainforest in Gombe. Although he and his family know about the dangers posed by humans, they let Goodall participate in their lives and include her in their family ties. The second part shows how similar our closest relatives are to us, how vulnerable they are and above all what activism is needed to safe the chimpanzees, the environment and in the end the mankind.

**Keywords:** Chimpanzee, Gombe, Wildlife Conservation, Bushmeat Trafficking, Deforestation

## Contents

1. Introduction	S. 4
2. Between Muhimbi trees and grewia fruits - Kobas perspective	S. 6
2.1 The sighting of the two-runner	S. 6
2.2 The boundaries are blurring	S. 8
3. Jane Goodall – Pioneer and Visionary	S. 10
3.1 Revolutionary in many areas	S. 10
3.2 TACARE or how poverty promotes extinction	S. 12
4. Conclusion	S. 14
5. References	S. 15

#### 1. Introduction

They are our closest relatives and we are their greatest enemies: great apes. We share more than 98% of our genetic material with chimpanzees and yet they are threatened with extinction because of humans. Habitat loss and fragmentation through deforestation of the rainforest and slash-and-burn clearances for palm oil or plantations as well as illegal hunting and trading for bushmeat, disease transmission, and the kidnapping of baby chimpanzees for human entertainment or as pets are some of the reasons why these non-human animals are fighting for their survival.<sup>1</sup>

Chimpanzees from Tanzania in East Africa have received the greatest worldwide attention in recent decades, and this is mainly due to one woman: Jane Goodall. Because of her long-term research in the Gombe Stream National Park and the groundbreaking insights she gained, Goodall was able to show more than anyone else how similar we really are to our closest relatives. The crown of creation was shaken by her work and with it our cruel treatment of the great apes. After the behavioural scientist was able to show that chimpanzees are also capable of building tools and using them, she became more and more aware of how threatened this species is and that in order to help them, she had to do more than observe them, and tell mankind about it.<sup>2</sup>

Since then, Jane Goodall has been doing educational work and is committed to animal and wildlife conservation as well as environmental protection. In addition, she makes clear the reasons for the threat to these mammals, including the existential poverty and destitution of the people in developing countries in Africa, which, according to Goodall, must be combated at all costs, so that animal protection can be brought to the attention of this poor population. To this end, she initiated the Lake Tanganyika Catchment Reforestation and Education-program (TACARE), which is now taking place in over 100 African villages. She has never given up hope that our world can change for the better and has made it her mission to show people her reasons for not giving up. The hope is for the chimpanzees, for the entire animal world, for the environment, the climate, and in the end for ourselves.<sup>3</sup>

This hope motivated me to write this paper for the seminar "Introduction to Environmental Anthropology." Inspired by the ideas of Jane Goodall, her early findings in behavioural research

<sup>&</sup>lt;sup>1</sup> Amsini, F. Et al.: Eastern chimpanzee: status survey and conservation action plan 2010-2020. International Union for Conservation of Nature (2010), Gland, Switzerland.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Goodall, Jane: Jane Goodall Institute. Homepage. Access: 26.03.2020. Available at: https://janegoodall.de/.

and thus also in anthropology and her subsequent decades of work, I have written this partly fictional but thoroughly fact-based work. Its relevance becomes particularly clear in showing the influence of humanity on our environment, in this example on the special ecosystem of the rainforest and its inhabitants, our closest relatives. Besides pointing out the problem, it seems important to me to show that there is hope and above all points to start stopping the process of destruction, and that all inhabitants of this earth have the same rights to nature and its preservation.

#### 2. Between Muhimbi trees and grewia fruits—Kobas perspective

"We must now either redefine what humans are or recognize chimpanzees as humans."<sup>4</sup> - Louis Leakey

#### 2.1 The sighting of the two-runner

When I saw her for the first time, I couldn't believe my eyes—never before had I seen a being of this shape on my wanderings through our home. It only took a few seconds before my gaze was returned and I ran away as fast as I could, climbed the next tree, and waited a long time until I finally dared to make my way home to my family. When I arrived there, it was early evening and the first thing I did was cuddle up in the nest that my mum had already built for the coming night high up in a Muhimbi tree, equipped with many cuddly leaves embedded on hard and stable branches and twigs. For as long as I can remember, I have never felt such a strong feeling of safety in any other place. Tired from my discovery, I fell into a twilight sleep.<sup>5</sup>

Shortly afterwards I was awakened by the calls of Fura, my mother: it was dinnertime. She sat at the stone place of our group with some nuts and fruits, and had already started to eat a juicy grewia fruit. I could not even think about food, and wanted to tell her about my experience. As I began, my mother froze and I saw hairs stand up on the back of her neck. "It

<sup>&</sup>lt;sup>4</sup> Klein, Stefan: Eine Affenliebe – Jane Goodall. In: Zeit Magazin Nr. 34/2011 (18.08.2011). Access: 26.03.2020. Available at: https://www.zeit.de/2011/34/Forschung-Jane-Goodall.

<sup>&</sup>lt;sup>5</sup> This paragraph is informed and inspired by this article: Merlot, Julia: Schimpansen haben's gern bequem. In: Spiegel Wissenschaft (17.04.2014). Access: 26.03.2020. Available at: https://www.spiegel.de/wissenschaft/natur/affen-schimpansen-schlafen-in-nestern-in-stabilen-baeumen-a-965056.html.

walked on its two legs like us, but without using its arms, and it only had hair on its head, which was light and long," I reported excitedly. Before Fura could answer, Jumbe, the highest-ranking male in our family, shouted: "A two-runner, a two-runner!" Then he ran to the next big tree root and drummed like crazy. Since we are not all on the road as a family during the day, this drumming is a good way to communicate. Coupled with Jumbe's loud screams, he wanted one thing above all else at that moment: to get the whole group together.<sup>6</sup>

As I flinched under his cries, I realized that I might have really seen a two-runner today. Why wasn't I aware of this the moment I saw her? Every single one of us had heard numerous stories about these beings. Cruel and brutal stories. All of us who came close to a two-runner did not contemplate meeting them, for fear of watching their home being destroyed. They kill trees, some of us say. I have also heard many stories of dead mothers and abducted babies. "They kill us, cut off our heads and hands and eat our brains and our meat" is whispered here and there from the trees. They want us dead; I have known that since my mother warned me about these creatures when I was a baby. She said "They don't use their hands to walk, they apparently don't climb very nimbly, have far too little fur to not freeze in the nest at night, and their heads look a little different, just like we look different from our neighbours, the gorillas and the bonobos." But what was the difference otherwise? Why do these two-runners hate and kill us and our home? If I was to believe the stories of Jumbe and all the others, there must be a reason for all this, right? That night I had so many questions in my head.<sup>7</sup>

When our entire family gathered around me, I could smell the fear and excitement. Many screamed, others groomed and deloused each other to calm down, and many wanted to know what exactly I had seen and whether trees had been killed or brothers and sisters had been attacked. The fact that I had only seen one female two-runner reassured most of them, because it is well known that these creatures, like us, hunt in groups. My mother wanted to protect me from the excited others and brought me to our nest, where I tossed and turned

\_

<sup>&</sup>lt;sup>6</sup> This passage is informed and inspired by this website: Dr. Janmaat, Karline: Obstmangel im Regenwald.

Verhaltensbiologie. In: Max-Planck-Gesellschaft (21.01.2016). Access: 25.03.2020. Available at:

https://www.mpg.de/9851694/schimpansen-verfuegbarkeit-nahrung. And:

Maier, Elke: Familienleben im Taï-Wald. In: Schimpansen – Feldforschung im Dschungel. Max-Planck-Gesellschaft. Access: 26.03.2020. Available at: https://www.schimpansen.mpg.de/20274/Sozialleben.

<sup>&</sup>lt;sup>7</sup> This paragraph is informed and inspired by this text: Jacob, Sandra: Immer weniger Platz für Afrikas Menschenaffen. In: In: Max-Planck-Gesellschaft (21.01.2016). Access: 25.03.2020. Available at: https://www.mpg.de/6362115/Menschenaffen\_Datenbank.

until the early morning hours. Fura didn't sleep a wink either. I saw that she felt guilty, she blamed herself for letting me out of her sight for too long and thought about what could have happened. For a long time now, since I was five years old to be exact, her care has diminished a little bit, because I have grown older and am now allowed to move through the forest alone for some time, shimmying along lianas, collecting food or fiddling with my friends or dozing in the shade. I can see from her worried look that this is over and that she will not let me out of her sight anymore.<sup>8</sup>

#### The boundaries are blurring

Over the next few days all the family members calmed down again. Just when the two-runner was no longer an issue among us, we met her, this time in a larger group. Although I was still curious, I joined Fura, Jumbe and the others and ran away screaming. Such clashes were repeated several times in the following days. I wonder if that two-runner was following us? She was always alone and only I noticed that she had bananas and other fruits with her. I always kept my eyes open for her and usually saw her before anyone else. That gave me a few seconds to study her face. I found it warm. She hardly moved, but her face radiated good-naturedness and she smiled, never looked grim or frightening. So, one day I took the chance and ran in her direction. I ignored my mother's cries and stopped a few meters in front of the two-runner and examined her. I felt that she wouldn't hurt me and the ice was broken. With my unrestrained curiosity, I knew that I wanted to come back and over the next few days I snuck away, watching the two-runner and every now and then taking a banana lying next to her big nest.

I knew that if she didn't threaten me, I would respect her. The more often I told the others about my excursions, the more interested they became and little by little some of my brothers and sisters accompanied me. After many weeks and even more days, we allowed the two-runner to pursue us and invade our home. Most of the time she was sitting or standing on the ground, which made us think that she was not good at climbing and was not trained to swing on lianas. So, we felt safest on the trees at the beginning. More and more of my group began to trust and came closer to the strange creature. Most of the time she held something in front of her eyes and looked at us or occupied her hands with something that looked like a

<sup>-</sup>

<sup>&</sup>lt;sup>8</sup> This paragraph is informed and inspired by this article: Maier, Elke: Wellness unterm Blätterdach. In: Schimpansen – Feldforschung im Dschun-gel. Max-Planck-Gesellschaft. Access: 26.03.2020. Available at: https://www.schimpansen.mpg.de/24578/Fellpflege.

small piece of a branch.

One day I decided to fish some termites from a mound of earth. The two-runner followed me and I will never forget her strange look when she saw me breaking off a thin branch of a tree, removing the leaves and using it to catch the termites from her burrow. Her eyes radiated so many emotions at the same time that I was briefly unsettled: joy, amazement, affection, amusement, and insane curiosity. I think she just didn't know how to make her own tools and go hunting with them, and was now amazed at her discovery. Anyway, not a day went by after that in which she did not follow our troop, and I had more and more the feeling that she was trying to imitate our behaviour. This confirmed my suspicion with the tools. Of course, we heard that she was not one of us, but her attempts were very good, because we noticed what she wanted to tell us with her calls or her body language. She learned new sounds and movements from us every day. I sometimes had the feeling that the babies in our family did not notice any difference from the rest of us; they very quickly became confident with the female two-runner.

Because the bright creature, as I called her after some time, was so fascinated by our way of catching termites, I fished for the small animals more often in the following weeks. I also showed her how we use stones and hard branches to crack nuts. I wondered why she didn't follow our example, and asked myself what the two-runner feeds on. Sometimes I saw her eating or drinking something, but I could not identify what she was consuming. We discovered many interesting things about her. What surprised us most was the way she communicated. The more familiar she became to us, the more often we saw other two-runners near her nest, but we never got too close to them. One day we heard her exchanging sounds with another two-runner, a male. When she was with us in the forest, however, she never used these sounds.<sup>9</sup>

At some moments I was amazed at how well our family had received the new member. It sometimes reminded me of the orphan named Nia that a female of our group found in the forest a few years ago and took with us, nursed and cared for like her own child, and finally integrated completely into our group. Nia still had some physical complaints, but without her adoptive mother she would not have survived. But we would probably never be able to completely absorb the bright creature, if only because she lacks the strength and speed to

-

<sup>&</sup>lt;sup>9</sup> The chapter 2.2 is informed and inspired by this homepage: Goodall, Jane: Jane Goodall Institute. Homepage. Access: 26.03.2020. Available at: https://janegoodall.de/.

keep up with us. I became especially aware of this once, when we were climbing up together, tickling and playing, and I gave her too much of a push: she fell over and made a sound of pain. She knew it was unintentional and as a sign of trust I let her groom me. She had arrived amongst us, although she would not be one of us.<sup>10</sup>

<sup>10</sup> 

<sup>&</sup>lt;sup>10</sup> This paragraph is informed and inspired by this text: Maier, Elke: Selbstlose Hilfe für Waisenkinder. In: Schimpansen – Feldforschung im Dschungel. Max-Planck-Gesellschaft. Access: 26.03.2020. Available at: https://www.schimpansen.mpg.de/23452/Adoption.

#### 3. Jane Goodall - Pioneer and Visionary



Picture: PD

#### 3.1 Revolutionary in many areas

Young, female and without a degree in the 1960s: not a typical example of a research career of that time. We're talking about Jane Goodall, a young secretary from England who first travelled to Africa in 1957 and met the anthropologist Louis Leakey. This encounter suddenly changed the life of this young woman. Endowed with an insatiable curiosity, understanding, and interest in great apes in the wild, Goodall was eventually hired by Leakey and travelled to Tanzania to observe chimpanzees in the Gombe Stream National Park. The anthropologist recognised early on that women in particular are made for this task of behavioural research, which demands patience and staying power. So he sent Dian Fossey to Rwanda to search for gorillas and Birute Galdikas to the orangutans in Borneo. As it turned out, Leakey's decision bore fruit, because these three women have all become renowned behavioural researchers and campaigners for the protection of the great apes. Last but not least, they also revolutionised the role of women in science. In Jane Goodall is a woman whose contribution to anthropology has been fundamental and who has been a model for generations of girls aspiring to careers in science. In Science.

<sup>&</sup>lt;sup>11</sup> Goodall, Jane: Jane Goodall Institute.

<sup>&</sup>lt;sup>12</sup> Sicotte, Pascale: Defining Jane Goodall. In: Current Anthropology Vol.49(2) (04.2008).

It took some time for the chimpanzees to get confident with Goodall and get them closer to them. Almost half a year passed by and it required a lot of patience from the young researcher. But then events changed course and one pioneering discovery followed the next. Goodall was the first to disprove the thesis that chimpanzees are only herbivores, because she observed not only how the family she observed ate a bush pig, but also the hunting behaviour of the primates. Equipped with binoculars and a notepad, she wrote everything down, including chimpanzees hunting in groups and hunting other primates. <sup>13</sup>

The most groundbreaking discovery that Jane Goodall made, however, was another: she watched the chimpanzee who had first trusted her make a rod out of a branch and then fish for termites. The revolution in science had thus become reality, and Goodall refuted the firm belief that *homo sapiens* alone is capable of producing and using tools. Goodall spent 25 years in Gombe and also provided science with numerous pioneering insights. Above all, this includes the four-year war that broke in 1974. The belief that great apes, unlike humans, had a purely peaceful nature, was abruptly disproved when a large group split up and was at war from then on. They fought for the previously shared territory and killed every rival they caught. It was terrible to see how similar they were to us. The young men were fascinated by the murder. They wanted to watch when another died, Goodall said.

Another observation which was hard to bear for the behavioural scientist was that chimpanzees practice cannibalism. She watched several female chimpanzees, whom she had kept an eye on for a long time, as they stole, killed, and ate the babies from other mothers of their group. In addition to all these interesting observations, the behavioural researcher had only one conclusion: Great apes, and especially chimpanzees, are much more similar to us than we previously thought and wanted to believe. She finally proved that these non-human animals also had individual personalities, that they were as capable of emotions like jealousy, affection, sadness, anger, joy and fear as humans, and that our relationship with them must therefore be changed.

\_\_\_

<sup>&</sup>lt;sup>13</sup> Goodall, Jane: Jane Goodall Institute.

<sup>&</sup>lt;sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> Klein: Eine Affenliebe.

<sup>&</sup>lt;sup>16</sup> Pusey, Anne Et al.: Severe Aggression Among Female Pan troglodytes schweinfurthii at Gombe National Park, Tanzania. In: International Journal of Primatology 29, 949. (29.07.2008). https://doi-org.emedien.ub.uni-muenchen.de/10.1007/s10764-008-9281-6.

<sup>&</sup>lt;sup>17</sup> Ibid.

#### 3.2 TACARE or how poverty promotes extinction

"Humans eat chimpanzees and vice versa.

Chimpanzees are primates like us with the difference that they will
never exterminate humans." 18 – Jane Goodall

When Jane Goodall realizes how bad the situation of the great apes worldwide is and what numerous man-made threats they are exposed to, she decides to drop her tents in Gombe and becomes an activity overnight. Even if she always returns to the national park, she is now at home all over the world and does educational work for the protection of chimpanzees, animal welfare and environmental protection. In order to counteract the destruction, deforestation and slash-and-burn of the rainforest, the home of the chimpanzees, she founds many projects that do educational work. This also includes the now global youth organization "Roots & Shoots," where young people learn how they can help animals and the environment in their respective situations and countries. It is precisely these young people that Goodall still hopes for today. In her interviews, she repeatedly emphasizes that there is still hope for planet Earth as long as some of the young people do not give it up and fight for improvement. To help chimpanzee babies whose parents were killed for bushmeat, Goodall founded the Tchimpounga Chimpanzee Rehabilitation Center, where more than 150 primates are now cared for, medically treated, and then partially released into the wild.<sup>19</sup>

There is one idea behind all this commitment: that the African population plays a crucial role in helping the chimpanzees and saving them from extinction. "We have to win over the affected people locally as partners for animal welfare" says the now 85-year-old British woman. Only if a rethink, more education, and an improvement in the living situation can be achieved, there is hope that the illegal hunting and the lucrative trade in the meat of cruelly killed and mutilated chimpanzees as well as the trade in orphaned babies and destruction of the rainforest out of greed for profit can be stopped. The Jane Goodall Institute created the Lake Tanganyika Catchment Reforestation and Education Program (TACARE) specifically for this purpose. Initially, TACARE served above all the villages around the Gombe National Park.

<sup>&</sup>lt;sup>18</sup> Klein: Eine Affenliebe.

<sup>&</sup>lt;sup>19</sup> Goodall, Jane: Jane Goodall Institute.

<sup>&</sup>lt;sup>20</sup> Voss, Jens: Jane Goodall: Armutsbekämpfung ist der Schlüssel zum Artenschutz. In: Na-tional Geographic (11.12.2017). Access: 23.03.2020. Available at: https://www.nationalgeographic.de/umwelt/2017/12/jane- goodall-armutsbekaempfung-ist-der-schluessel-zum-artenschutz.

It helped people there to survive from poverty by teaching them sustainable farming methods and launching an initiative to reforest already destroyed forests to support one of the largest lungs on earth.<sup>21</sup>

Since deforestation and the trade in bushmeat are the only possible sources of income for many people in Tanzania, Goodall has to start at precisely this point. The fighter for our closest relatives is certain that "the chimpanzees will only have a future if people have a future." <sup>22</sup> If you look at all the challenges of a world in which all animals and, in this case, great apes can lead an equal life on an equal footing with *homo sapiens*, one could easily lose hope. In Africa, corruption, exploding birth rates, existential poverty, and a lack of education play a major role, propping up the system that is destroying wildlife and the environment. For many people, world-famous environmentalist and pioneer Jane Goodall is the person who gives hope and shows why it is worth fighting for a future. <sup>23</sup> Because people destroy ecosystems, like the rainforests of this earth and their animals, which all play their own important role in this system, they also destroy themselves. And so the appeal of Jane Goodall remains: "With every decision we can make a personal contribution." <sup>24</sup>

-

<sup>&</sup>lt;sup>21</sup> Grossman, Amy / Mavanza, Mary: Conservation and family planning in Tanzania: the-TACARE experience. Case Study. In: Population and Environment Vol.28(4), (2007).

<sup>&</sup>lt;sup>22</sup> Voss, Jens: Jane Goodall: Armutsbekämpfung ist der Schlüssel zum Artenschutz. In: Na-tional Geographic (11.12.2017). Access: 23.03.2020. Available at: https://www.nationalgeographic.de/umwelt/2017/12/jane- goodall-armutsbekaempfung-ist-der-schluessel-zum-artenschutz.

<sup>23</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Ibid.

#### 4. Conclusion

In summary, mixed feelings remain. Humanity knows what to do, and yet we are dependent on the few who take action, like Jane Goodall, who gives hope to everyone else. The example of the endangered chimpanzees in Tanzania shows very clearly that we can only protect these animals and the rainforest ecosystem by giving perspective to the people who live there. Koba and his story should show what Goodall already demonstrated many decades ago: that great apes are so similar to us that they are individual and have feelings of all kinds, and deserve to be treated equally. After all, it was our species that took their homes and lives; it is now up to us to make amends. Everyone can make a contribution, however small an individual action may be. And as long as we fight, there is still hope for the chimpanzees, the great apes, all animals, the climate, the environment, and also for us.

#### 5. References

Amsini, F. Et al.: Eastern chimpanzee: status survey and conservation action plan 2010-2020. International Union for Conservation of Nature (2010), Gland, Switzerland.

Klein, Stefan: Eine Affenliebe – Jane Goodall. In: Zeit Magazin Nr. 34/2011 (18.08.2011). Access: 25.03.2020. Available at: https://www.zeit.de/2011/34/Forschung-Jane-Goodall.

Dr. Janmaat, Karline: Obstmangel im Regenwald. Verhaltensbiologie. In: Max-Planck-Gesellschaft (21.01.2016). Access: 25.03.2020. Available at: https://www.mpg.de/9851694/schimpansen-verfuegbarkeit-nahrung.

Goodall, Jane: Jane Goodall Institute. Homepage. Access: 26.03.2020. Available at: https://janegoodall.de/.

Grossman, Amy / Mavanza, Mary: Conservation and family planning in Tanzania: the-TACARE experience. Case Study. In: Population and Environment Vol.28(4), (2007).

Jacob, Sandra: Immer weniger Platz für Afrikas Menschenaffen. In: In: Max-Planck-Gesellschaft (21.01.2016). Access: 25.03.2020. Available at: https://www.mpg.de/6362115/Menschenaffen Datenbank.

Maier, Elke: Familienleben im Taï-Wald. In: Schimpansen – Feldforschung im Dschungel. Max-Planck-Gesellschaft. Access: 26.03.2020. Available at: https://www.schimpansen.mpg.de/20274/Sozialleben.

Maier, Elke: Wellness unterm Blätterdach. In: Schimpansen – Feldforschung im Dschungel. Max-Planck-Gesellschaft. Access: 26.03.2020. Available at: https://www.schimpansen.mpg.de/24578/Fellpflege.

Maier, Elke: Selbstlose Hilfe für Waisenkinder. In: Schimpansen – Feldforschung im Dschungel. Max-Planck-Gesellschaft. Access: 26.03.2020. Available at: https://www.schimpansen.mpg.de/23452/Adoption.

Merlot, Julia: Schimpansen haben's gern bequem. In: Spiegel Wissenschaft (17.04.2014). Access: 26.03.2020. Available at: https://www.spiegel.de/wissenschaft/natur/affen-schimpansen-schlafen-in-nestern-in-stabilen-baeumen-a-965056.html.

Pusey, Anne Et al.: Severe Aggression Among Female Pan troglodytes schweinfurthii at Gombe National Park, Tanzania. In: International Journal of Primatology 29, 949. (29.07.2008). https://doi-org.emedien.ub.uni-muenchen.de/10.1007/s10764-008-9281-6.

Sicotte, Pascale: Defining Jane Goodall. In: Current Anthropology Vol.49(2) (04.2008).

Voss, Jens: Jane Goodall: Armutsbekämpfung ist der Schlüssel zum Artenschutz. In: National Geographic (11.12.2017). Access: 23.03.2020. Available at: https://www.nationalgeographic.de/umwelt/2017/12/jane-goodall-armutsbekaempfung-ist-der-schluessel-zum-artenschutz.