CONSERVATION PLAN & SUMMARY



2025



NEW THREADS IN THE CONSERVATION WEB



Wingham Wildlife Park

Conservation Plan & Impact Statement 2025:

New Threads in the Conservation Web

Compiled 23rd June 2025

By Markus Wilder

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Samantha Eden

Due for review and renewal by end of March 2026

Wingham Wildlife Park
working in association with:
Wingham Wildlife Park Animal Welfare
(reg charity number 1162346)

to bring the highest quality to our conservation work.

Cảm ơn...

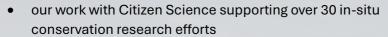
...Or thank you to those who don't speak Vietnamese. Thank you for taking the time to read about the conservation work we are so proud of here at Wingham Wildlife Park.

Conservation is complex, multifaceted and encompasses more issues than any single organisation can address. That is why we, at Wingham Wildlife Park, are committed to working together for nature. The 2025 edition of Wingham Wildlife Park's Conservation Plan & Impact Statement celebrates our unity with similarly focussed organisations as well as new projects that we have undertaken to broaden the number of concerned species that we are preserving.

Overcoming challenges in biodiversity loss can rarely be solved in a single year. Decades of dedication are often required to bring species back from the brink of extinction. In this report, we will bring you updates from:

- our ongoing work with Bristol Zoological Society to increase wild populations of white-clawed crayfish,
- our involvement with European Ex-Situ Programmes (EEPs) supporting captive populations of over 30 species,





our second year working with Viet Nature in Vietnam.

We have always been very proud of our commitment to the care and preservation of species that are often viewed as less charismatic and therefore have significantly underfunded conservation efforts (Guénard et al., 2025). Despite constituting over 85% of the Animal Kingdom, invertebrates receive just 6% of conservation funding and amphibian-based projects receive just 3% of funds raised worldwide. So, in 2024, when we had the opportunity to expand our contribution to the lemur leaf frog EEP by receiving breeding individuals as part of a future release programme, we were all too happy to invest. But it was our work with invertebrates that erupted in 2024 when were asked to take on and care for over 150 beautiful and critically endangered Gooty sapphire ornamental tarantulas.

It is a pleasure and a privilege to preserve the natural world for the species that we care for so deeply. But it is only possible thanks to our dedicated and loyal supporters. To every guest that has visited Wingham Wildlife Park and every donor to Wingham Wildlife Park Animal Welfare, we extend our most heartfelt thanks for making this conservation report possible each year.

Việt Nature

Updates from Vietnam

In 2022, Wingham Wildlife Park, in collaboration with Viet Nature, established a five-year project to "Strengthen the critically endangered Vietnamese crested argus' strongholds at Dong Chau-Khe Nuoc Trong Nature Reserve, Viet Nam". As we near the mid-point of this project, we wanted to reflect on all that has been achieved so far, and what is still to come.

By the end of 2023, the foundations of the project were firmly in place and as we entered 2024, it was fantastic to see the project fully fledge.

The camera traps purchased in 2023 were commissioned and installed in March 2024. They were placed in the forest in a grid pattern to ensure the most accurate and unbiased wildlife population surveys. After 100 days had passed (including the believed breeding season for the crested argus), the camera traps were collected. Amazingly, all camera traps were recovered, with no losses nor damage. Given the conditions and the nature of the wildlife in this area, this was a real achievement! The data collected was analysed in more detail from the second half of 2024 and this will continue into 2025 but initial review shows positive crested argus sightings – a great sign that these surveys will yield some really useful results.



The results will be used to guide patrols and focus on areas with known crested argus populations – especially any breeding pairs – that are located.



The first field patrols funded by this project and employing community staff were co-ordinated in 2024. Focusing on areas where the crested argus has been recorded, patrols aim to deter illegal activities in the forest. The most valuable work from patrols, is the removal of snares. Snares are a cruel and indiscriminate trapping method, posing a threat to a huge number of animals. By removing snares, patrols aim to reduce the suffering of individual animals as well as reduce the negative human

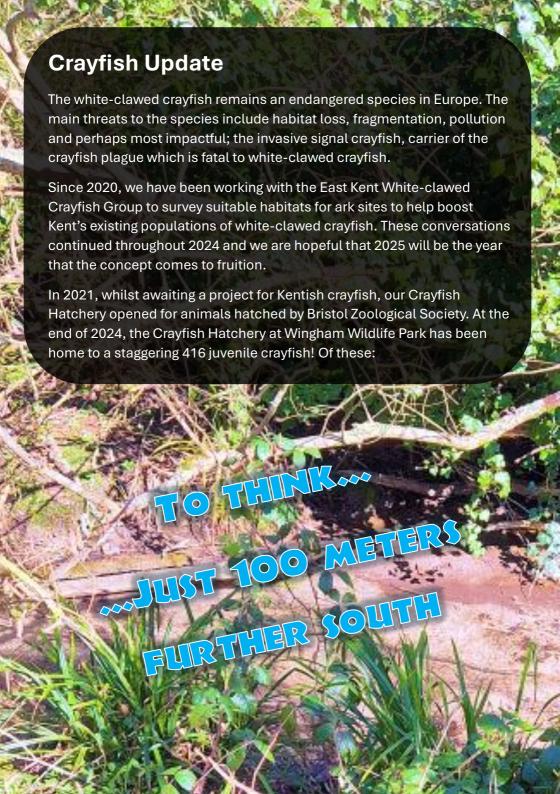
impact on the overall wildlife populations. Unfortunately, patrols cannot be everywhere all the time and sadly, one patrol came across a trap that had caught a wild boar. The boar was not recovered by the hunters and may have suffered for hours before passing. All that remained when the patrols discovered the scene was a decomposed carcass. Scenes like this really help us to understand how our work is making a difference – without patrols in this area, how many more animals would suffer in this way and how many more crested argus would succumb to traps before the species becomes extinct?

Going into 2025, the project will focus on processing and analysing data collected from the camera traps and employing, training and supporting individuals from the local community to manage patrolling activities. Whilst the aim of this project is to conserve the crested argus, this is a broad programme, considering the long-term preservation of the habitat through the employment of local people and education of local communities. Until September 2024, our work in Vietnam was working alongside another project funded by World Land Trust. As a site that has been identified as a suitable location for the reintroduction of the Vietnam pheasant, the World Land Trust funded project was supporting the regeneration of degraded areas in the Dong Chau-Khe Nuoc Trong forest in preparation for such reintroductions. Since the end of 2024, this project has scaled back and whilst World Land Trust are continuing their support, it is on a much smaller scale than in previous years.

This leaves us with an exciting, but daunting, challenge to step-up our input for 2025 and beyond. As such, our project will be shaped slightly differently in 2025, focusing on the preservation of the habitat and researching the habitat in support of the Vietnam pheasant reintroduction work through the employment and training of staff to increase both antisnare and research-related patrols. With a slight reallocation of funding, we are confident that we will achieve the broader reach required without compromising our work with the crested argus.

So much has been achieved in our first two and half years, we can't wait to see how much more we can achieve in the coming years.









Recording the wild birds sighted at Wingham Wildlife Park has been part of our bird keepers' daily routine since 2021. Last year, we reported that staffing changes had led to a decrease in records of bird sightings from 2022 to 2023 (from 198,867 to 77,180). We are delighted to say that our newer team members are now undertaking training in native species identification, and this is greatly improving our record-keeping. In 2024, a total of 100,225 records were made and we are hopeful that as training progresses, this will increase even further in 2025.

Most notably, in 2024 the total number of bird species recorded was sixty, an increase of eleven from the previous year. Three of these species (lesser black-backed gull, white-tailed sea-eagle and sedge warbler) are amber list species (decreasing population trend) and one (skylark) is a red list species (endangered). The purpose of recording these sightings is to determine whether Wingham Wildlife Park is successfully providing suitable habitat for a wide range of wild birds and identifying animals that are rare or becoming rare is an indication that we are meeting our aims.

Of the sixty species sighted in 2024, 33 were green listed species, 16 were on the amber list and 9 were red listed species. Only one species seen in 2023 was not identified in 2024; the kingfisher. Whilst it is a

disappointment that the kingfisher was not sighted, we are delighted to have Wingham Wildlife Park's first recorded sightings of twelve new species: feral pigeon, goldcrest, greenfinch, hobby, lesser black-backed gull, little egret, little owl, redpoll, sedge warbler, skylark, white-tailed sea-eagle and whitethroat.

As in 2023, the three most sighted birds were house sparrows, starlings and mallards and all eight of the red listed species seen in 2023 were seen again in 2024. This is a positive indication that the populations of these birds are stable in this habitat.

Species recorded in 2024 were:

Blackbird	Blackcap	Black-headed gull
Blue tit	Carrion crow	Chaffinch
Chiffchaff	Collared dove	Common buzzard
Coot	Cormorant	Dunnock
Feral pigeon	Fieldfare	Garden warbler
Goldcrest	Goldfinch	Great spotted woodpecker
Great tit	Green woodpecker	Greenfinch
Grey heron	Grey wagtail	Greylag goose
Herring gull	Hobby	House martin
House sparrow	Jackdaw	Jay
Kestrel	Lesser black-backed gull	Linnet
Little egret	Little owl	Long tailed tit
Magpie	Mallard	Mandarin duck
Mistle thrush	Moorhen	Pied wagtail
Raven	Red kite	Red poll
Redwing	Ring-necked parakeet	Robin
Rook	Sedge warbler	Skylark
Song thrush	Sparrowhawk	Starling
Swallow	Swift	White-tailed sea-eagle
Whitethroat	Wood pigeon	Wren

Green list species: Not endangered, population stable or increasing (Stanbury et al., 2021).

Amber list species: Not endangered, population decreasing (Stanbury et al.,2021).

Red list species: Endangered, population decreasing (Stanbury et al.,2021).

Alien invasive species.



Ex Situ Conservation

Conserving animals and the environments they inhabit in the wild is imperative. We work with several charities and organisations to protect and conserve wildlife in-situ but as a zoological setting, our biggest contribution to conservation is through the care and breeding of animals here at Wingham Wildlife Park.

In recent years, more and more species are being saved from extinction in the wild thanks to insurance populations in zoos and aquariums. By working collaboratively and with the oversight of international associations, zoos and aquariums now manage an array of breeding programmes that are long-term, data-driven and welfare-focussed conservation strategies. These breeding programmes are becoming evermore essential in the preservation of species under threat from human encroachment, overexploitation and alien species invasions; by increasing population size and engaging our guests with practices that can reduce human impact on the environment.

We are very proud to have expanded our collaboration in 2024 and are now not only members of the British and Irish Association of Zoos and Aquaria (BIAZA) and the European Association of Zoos and Aquaria (EAZA), we have also joined the World Association of Zoos and Aquaria (WAZA). This global reach is enabling us access to the very best animal care resources and have the greatest contributions to captive breeding programmes.

Some breeding programmes have undergone changes in the past year; of note is the spiny hill turtle programme being upgraded from an ESB to an EEP. Breeding programmes are regularly reviewed and many ESBs are now being phased out; ideally by promotion to an EEP (led by an appointed coordinator and elected committee).

It is very exciting when an ESB is upgraded to an EEP, especially for the less "mainstream" animals, like spiny hill turtles, as this means more representation and advocation for their conservation.

However, for some ESBs, the unfortunate decision must be made that a species is under-represented in European zoos and a breeding programme has limited chance of success. In these circumstances, the ESB is reframed as a "Monitored Species" Programme. Regrettably, the Savu Island python ESB was one such programme that was reframed in 2024 and the species is now monitored.

In 2024, we participated in the following breeding programmes:

EEP		ESB / Monitored Species
Aldabra giant tortoise	Hyacinth macaw	African dwarf
		crocodile
Amur leopard	Jaguar	Asian small-clawed
		otter
Annam leaf turtle	Lemur leaf frog	Asiatic black bear
Arctic wolf	Lowland tapir	Blue crowned pigeon
Barbary macaque	Mandrill	Cuban crocodile
Binturong	Pink backed pelican	Eurasian lynx
Black howler monkey	Pygmy marmoset	Grey crowned crane
Black and white ruffed	Red handed	Linne's two-toed sloth
lemur	tamarin	
Blesbok	Red panda	Military macaw
Bornean orangutan	Ring tailed lemur	Northern Luzon cloud
		rat
Clouded leopard	Rothchild's giraffe	Rhinoceros iguana
Common marmoset	Senegal bushbaby	Savu Island python
Common squirrel	Southern cheetah	
monkey		
Cotton top tamarin	Smooth-coated	
	otter	
Eastern black and	Spiny hill turtle	
white colobus monkey		
Geoffroy's cat	Vietnam pheasant	
Goeldi's monkey	Visayan warty pig	
Gooty sapphire	Western	
ornamental tarantula	chimpanzee	
Humboldt penguin		

As well as participation in breeding programmes, knowledgeable and experienced staff members at Wingham Wildlife Park contribute their time and expertise to committees and working groups overseeing these programmes. Sharing knowledge is imperative to ensuring the success of breeding programmes and securing a bright future for the species involved.

Markus Wilder, Animal Collections Curator

With 19 years of experience in the animal community and specialising in the care of reptiles, amphibians and invertebrates, Markus is determined to drive conservation initiatives that focus on these taxa. Formerly, Markus has been the studbook keeper for the Savu Island python ESB however, following the decision to change this to a Monitored Species Programme combined with Wingham Wildlife Park's rehoming of over 200 confiscated animals (read on for more information), he decided to pursue a new opportunity in 2024 as EEP co-ordinator for Gooty sapphire ornamental tarantulas. He also remains an EEP committee member for lemur leaf frogs.



Becky Johnson, Head of Birds

Having specialised in the care of all manner of bird species housed at Wingham Wildlife Park and being actively involved in tracking programmes for British wildlife, Becky is both a fountain of avian knowledge and enthusiastic conservationist. In 2024, she remained a highly respected EEP committee member for pink-backed and spot-billed pelicans.

Georgia Brett, Head of Carnivores

Joining the Wingham Wildlife Park team in a new role as Head of Training in 2021, Georgia enabled the progression of animal training and improved husbandry techniques for a range of species. In her new role as Head of Carnivores, Georgia continues to oversee animal training for all species at the park as well as the husbandry of the animals on her section; including smooth-coated otters. In 2024, Georgia became an EEP committee member for smooth-coated otters and she looks forward to sharing her experiences with the wider zoo community.

Georgia & Becky





The lemur leaf frog is a critically endangered amphibian found in Central America, specifically the lowland rainforests of Panama and Costa Rica. The primary threats to the species are habitat loss due to deforestation and diseases such as chytridiomycosis, a fungal infection affecting a wide range of amphibians.

Since 2022, we have been committee members for the lemur leaf frog EEP and have housed the species in a dedicated, specialised Frog Room. The Frog Room operates in isolation from all other areas at Wingham Wildlife Park as a quarantine environment to protect this sensitive species. The room is climate controlled and uses RO filtered water to mimic natural fluctuations in temperature, humidity and precipitation from day to night and from dry to wet seasons.

The first lemur leaf frogs in our care joined us in 2022 but these individuals were moved to the Manchester Museum in 2024. Unusually for a museum, Manchester Museum house a small number of rare and endangered reptiles and amphibians with an absolute focus on conserving the species in their care. We were very lucky to be able to visit the collection when we moved our frogs and gain some excellent insight to the museum's success breeding lemur leaf frogs – being the first ex-situ site to do so.

One of the most rewarding aspects of conserving species as a zoological collection, is the collaboration between industry leaders, sharing specialist expertise purely for the benefit of the animals in our care and their wild counterparts. Armed with some useful pointers from Manchester Museum, we welcomed a new group of lemur leaf frogs from Bristol Zoo Project to Wingham Wildlife Park at the end of 2024, compromising of five breeding pairs.

Some animals within the lemur leaf frog EEP have been placed into quarantine conditions pre-emptive of a release programme being established in Costa Rica. The pairs that came into our care in 2024 are members of the quarantine group which means, if they breed successfully at Wingham Wildlife Park, their descendants may have the opportunity to live in their natural habitat.

Within the first few days of arrival, two pairs were mating! In the hope that this early mating would be successful, we began preparations for offspring. The enclosures in the Frog Room are perfect for the frogs, offering large leaves that they can rest on and lay their eggs. But if we were going to have fertile eggs, we would also need to be ready for tadpoles. A small amount of water was added to the bottom of the enclosures so the tadpoles could safety drop from the egg jelly on the leaves into the water, just as they would in the wild. We also prepared four new aquariums for the tadpoles to move into giving them a place to complete their metamorphosis.

The Frog Room was built to hold seven enclosures, but with five of these inhabited by breeding pairs, one having to make way for the tadpole aquariums and lemur leaf frogs being able to lay batches of 6-20 eggs at a time, we needed to expand. The Frog Room was originally built in two halves: one for lemur leaf frogs and another for a second amphibian. However, we have made the decision to focus on the conservation effort for this species specifically to make the biggest impact that we can. A further ten enclosures have been added in the second half of the Frog Room to accommodate offspring, and we will be keeping our fingers crossed for breeding success in 2025.



JANUARY

Rothchild's Giraffe

 Two male Rothchild's giraffe joined us from Belfast Zoological Gardens bringing our "tower" to a total of four animals. We do not breed giraffe at Wingham Wildlife Park but housing a bachelor group here enables the breeding programme to continue at other zoos in the UK and Europe by providing homes for young males that cannot stay in their maternal herds.

FEBRUARY Howler Monkey

•We celebrated the birth of a black and gold howler monkey. Classified as near threated in the wild, this species is suffering a population decline in its natural habitat. The breeding programme for black and gold howler monkeys is essential to ensuring that there is a healthy population in captivity should the wild population suffer further decline.

MARCH

Hermann's Tortoise

• Whilst, currently, there is no managed breeding programme for the Hermann's tortoise, they are classified by the IUCN as vulnerable with a decreasing population trend. We celebrated the hatching of two Hermann's tortoises in March and a further three hatched in August too.

APRIL

Goeldi's Monkey

•We welcomed Eugene, a male Goeldi's monkey to Wingham Wildlife Park in April. He had been recommended by the EEP co-ordinator as a suitable mate for a female who was born here in 2013, named Ebony. We were delighted that in October, Eugene and Ebony welcomed their first offspring. The parents and youngster are all doing well.

MAY

Humboldt Penguins

• 2024 was an incredibly successful year for penguin breeding at Wingham Wildlife Park. In May, we welcomed our second penguin chick of the year before welcoming our fourth and fifth chicks in June and July. The 2024 quartet are two females; Poderick and Piccolo, and two males; Pigeon and Peri.

JUNE

Black and White Ruffed Lemurs

 Three, female black and white ruffed lemurs joined the collection in June and we are working with the EEP co-ordinator to locate a suitable male to join them. There are over 140 species of lemur and all are threatened so we are very proud to be part of breeding programmes for two species of these Madagascan primates.

JULY

Bornean Orangutan

• Awan, a female Bornean orangutan joined us in July. Her and Jin (one of our resident males) had a breeding recommendation from the EEP so it was imperative that we accommodated her. Jin and Awan are getting along famously and we are keeping everything crossed for breeding success with this species in the future.

AUGUST

Ornamental Tarantulas

•We want to conserve the big and well-known animals, but also the smaller and more overlooked species. In August, we became home to over 150 critically endangered Gooty sapphire ornamental tarantulas that had been confiscated by customs. This doubled the number of individuals in the EEP and inspires hope for the future of this breeding programme.

SEPTEMBER EAZA Conference

 Animal Collections Curator, Markus Wilder and Finance Director, Scott Binskin attended the EAZA Conference in Leipzig, Germany, Collaboration is the key to ex situ conservation success and attendance ensures Wingham Wildlife Park shares knowledge and experience with the wider zoo community. Markus delivered a talk on the BioBanking process to help other zoos join this vital research project.

OCTOBER

Geoffroy's Cat

• Lonan the Geoffroy's cat joined us in October and is swiftly becoming a fan-favourite. The EEP co-ordinator for the species required new holders to prevent the breeding programme from reaching a "bottle-neck." We had a perfect area for him and are awaiting news of a breeding female becoming available to join him.

NOVEMBER

Lemur Leaf Frogs

•We have become home to breeding pairs of lemur leaf frogs. The lemur leaf frog breeding programme includes a number of animals that are housed in quarantine conditions, enabling the imminent release to the wild of any offspring. We house some of the quarantine animals, meaning offspring from the pairs here could one day be released into their natural habitat.

DECEMBER

Ring-tailed Lemurs

•When breeding programmes reach a "bottle neck," animals that could breed are prevented from doing so for fear that there would be nowhere to place the offspring. We decided to house a bachelor group of ring-tailed lemurs so that other collections could continue breeding this critically endangered primate. In December, we welcomed two males to join the four that came to us in May.

Working with UK Customs

One of the greatest threats to wildlife is the trade of animals and their by-products. In 1963, the International Union for Conservation of Nature (IUCN) met and began the process of introducing a new convention that would prevent uncontrolled trading of rare and endangered species. Ten years later, in 1973, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was agreed by representatives of 80 countries and has been in force since 1st July 1975.

CITES ensures the sustainability of the trade in hundreds of species animals and plants as well as products derived from them (such as exotic leather goods, musical instruments, medicine and many other examples). This convention, formed with international co-operation, safeguards over 40,000 species of fauna and flora from over-exploitation.

UK Customs are responsible for checking that specimens being imported and exported are accompanied by the appropriate documentation and enforcing CITES legislation. Despite failure to present the correct documentation carrying a prison sentence of up to 7 years, an unlimited fine or both, every year thousands of animals, plants and by-products are confiscated at customs as people attempt to illegally transport rare and endangered species.



But what happens after a specimen is confiscated? Animal by-products and plant specimens can be stored in protected, certified premises such as secure storage facilities, museums (where they can be used for educational purposes) or destroyed to prevent them re-entering the illegal trade. The complications increase dramatically when live animals are confiscated.

All live animals confiscated (under CITES legislation or for any other reason) at UK borders are transferred to the Heathrow Animal Reception Centre under the authority of UK Customs. This is an hugely complex facility able to offer temporary, emergency care to an enormous range of species at a moment's notice, as well as carrying out its usual operation of processing pets, livestock and other animals for transport in and out of the country. Confiscated animals received by the centre are held in quarantine facilities where they can be tested for diseases that may cause harm to native wildlife and/or owned animals (pets, livestock etc) residing in the UK. Sadly, many animals being illegally transferred are found to have such diseases and these animals are humanely euthanised and destroyed. Those that are given the all-clear can remain in the centre for a while, but the facility has a limited capacity and if space runs out, there may be no other option but to euthanise healthy animals.

For many years, Wingham Wildlife Park has offered a home to animals being held by UK Customs, ensuring that wherever possible, healthy animals need not be euthanised. In 2024, we offered a home to over 250 animals from Heathrow's Animal Reception Centre; some of which are endangered or critically endangered and are now vital members of the EEP programme for their species. Not only has this rehoming effort protected the future of the individuals involved, but it has also enabled UK Customs to provide accommodation for other animals and prevented the need to euthanise healthy individuals of threatened species.

Every animal is important and deserves a certain future with high standards of care and welfare. That is our main aim when offering homes to confiscated animals. But sometimes, rehoming these animals means more than that alone. The 152 critically endangered Gooty sapphire ornamental tarantulas have become key individuals in the EEP breeding programme for the species.

The following animals came to Wingham Wildlife Park from UK Customs in 2024:

Common Name	Scientific Name	CITES Appendix & IUCN Status	Individuals
Gooty sapphire	Poecilotheria metallica	II – Critically	152
ornamental		Endangered	
tarantula			
Sand gecko	Tropiocolotes	N/A – Least Concern	41
Common emperor scorpion	Pandinus imperator	II – Not Evaluated	10
Electric blue tarantula	Chilobrachys	N/A – Not	10
	natanicharum	Evaluated	
Indian ornamental tarantula	Poecilotheria regalis	II – Least Concern	10
Goliath pinkfoot	Theraphosa apophysis	N/A – Not	7
tarantula		Evaluated	
Rameshwaram	Poecilotheria	II – Critically	6
ornamental tarantula	hanumavilasumica	Endangered	
Thick-tailed gecko	Underwoodisaurus milii	III – Least Concern	6
Ghost ornamental tarantula	Poecilotheria vittata	II – Endangered	5
Panther chameleon	Furcifer pardalis	II – Least Concern	5
Rainbow boa	Epicrates cenchria	II – Least Concern	4
Sambava tomato frog	Dyscophus guineti	II – Least Concern	4
Giant East African	Lissachatina fulica	N/A – Not	3
snail		Evaluated	
Magnificent	Helicophanta magnifica	N/A – Not	3
helicophanta snail		Evaluated	
Brazilian salmon	Lasiodora parahybana	N/A – Not	2
tarantula		Evaluated	
Knobtail gecko	Nephrurus levis	III – Least Concern	2
Limicolaria flammea	Limicolaria flammea	N/A – Not	2
snail		Evaluated	
Mexican red-legged tarantula	Brachypelma emilia	II – Least Concern	2
Texan tan tarantula	Aphonopelma anax	II – Not Evaluated	2
Whiteknee tarantula	Acanthoscurria	N/A – Not	1
	geniculata	Evaluated	



Research

Wildlife conservation is only possible with a strong foundation of knowledge and data. Knowledge and data are collected through carefully selected research projects that enable us to deepen our understanding of the animal kingdom. Whether it be studies undertaken with the animals housed at Wingham Wildlife Park or supporting in-situ conservation projects with data-processing; we are committed to advancing our comprehension of the natural world so that informed decisions can be made surrounding the conservation of individual species, whole ecosystems and wider environments. Wingham Wildlife Park contributed to no less than forty-four research projects in 2024, supporting both insitu and ex-situ conservation efforts in six of the seven continents.

Citizen Science Research Participation

The principal of citizen science is to support professional researchers with the processing of data. For the most part, data gathered is observational (images, videos, sounds etc) and with advances in technology, the volume of data that can be collected is growing (Simmonds et al, 2020). More data means more accuracy in research and can build a far better understanding of the subject but processing these vast volumes of data is time consuming and simply not possible for small teams of professional researchers. By enlisting the help of the general public, experts can produce datasets that would otherwise be infeasible to generate (Kosmala et al, 2016) and draw more accurate conclusions to their studies.

By being involved in citizen science, individuals can improve their awareness of scientific issues and increase their engagement with the solutions (Kaptan and Mohsen, 2023). In the context of wildlife conservation, participation in citizen science can expand understanding of a range of environmental issues: fauna and flora populations, biodiversity, invasive species, land use change, pollution, climate change and many more (Theobald et al, 2015). It is only through wider understanding of these issues that we can hope to engage society with environmental conservation strategies.

Once again, our office-based staff members have each been allocated one hour per week to participate in citizen science. Each team member can select one

nature-based project to work on every week from over 80 active projects listed by Zooniverse (Zooniverse.org/projects). Their contributions are supporting in-situ research into conservation matters concerning both focal species and wider ecosystems.

In total, in 2024, we dedicated 148 hours to citizen science and contributed to 32 in-situ research projects.

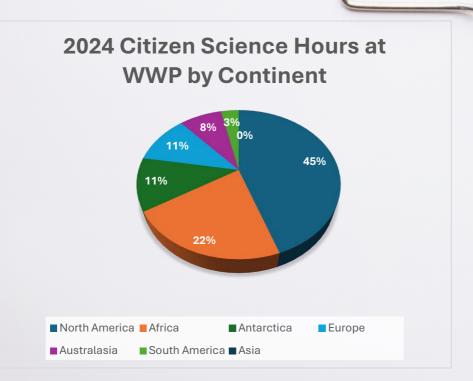
Title	Focus	Hours
Penguin Watch	Studying the breeding behaviours of	16
	Southern rockhopper penguins in the	
	context of climate change.	
WildCam Gorongosa	Documenting the post-war recovery of the	13
	Gorongosa National Park.	
Wildwatch Kenya	Monitorring population, ecology and	13
	interactions of the reticulated giraffe	
	(Giraffa camelopardalis reticulata).	
Big Bee Bonanza!	Understanding bee biodiversity and	11
	decline.	
Iberian Camera Trap	Monitoring diversity and population of	11
Project	fauna in Iberia.	
Everglades Wildlife	Documenting wildlife throughout the	9
Watch	Greater Everglades ecosystem and South	
	Florida.	
Snapshot Wisconsin	Understanding wildlife populations,	9
	behaviour and interactions in Wisconsin.	
Chicago Wildlife	Developing a full understanding of wildlife	7
Watch	diversity and population in Chicago, USA.	
Chimp & See	Understanding the ecological and	6
	evolutionary drivers that have contributed	
	to the behavioural and cultural diversity of	
	chimpanzees.	
Killer Whale Count	Understanding the threat of killer whale	6
	predation to the Stellar sea lions in the	
	western region of the Aleutian Islands.	
Iguanas from Above	Monitoring populations of Galapagos	5
	marine iguanas.	
Nebraska Wildlife	Locating remnant populations of Eastern	4
Watch	spotted skunks in Nebraska.	

Beluga Bits Analysing the social structure and natural history of the beluga that visit the Churchill River in Northern Manitoba, Canada. Frog Find Monitoring frog species and populations in New South Wales National Parks. Indigo Snake Watch Identifying indigo snakes that have been reintroduced in northwest Florida. Wildwatch Documenting the behaviours and developmental milestones of burrowing owl families in Otay Mesa, California. Yooper Wildlife Understanding wildlife ecology across varying landscapes in the Upper Peninsula of Michigan. Back Bay Bird Identification Biloxi, Mississippi. Penguins from Assessing the population of erect-crested penguins. South Coast To protect Western Australia's rarest mammal and bird: Gilbert's potoroo and the Western ground parrot. The Koster Seafloor Observatory Identifying individual spoonbills to understand how birds cope with annual migrations. Camera Watch Managing introduced predators that threaten native wildlife in Western Australia. Canyon Critters Understanding how tourist infrastructure impacts wildlife communities in U.S. National Parks. Mammal Traits from Western North America interact with America	Shark Spy	Determining information about shark	4
Beluga Bits		populations including diversity,	
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Assessing the number of adults and chicks	1
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Island.	
Understanding where and how seabirds are	1
most affected by local impacts (e.g.	
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In 2023, we dedicated 186 hours to 32 projects. Whilst the number of projects contributed to has stayed the same, the number of hours has fallen slightly. This is likely due to some small staffing changes and a dip in contributions whilst new team members were being inducted. Under these circumstances, we are very proud to have maintained contribution to as many projects as we did in 2023.

In 2024, the team dedicated the most hours to Penguin Watch; a project we also supported in 2023. This project is now 95% complete and we hope that researchers are beginning to see some valuable datasets in their quest to understand the impact of climate change on Southern rockhopper penguins. In the previous year, our most contributed to project was Wildwatch Kenya and whilst the team had dedicated 24 hours in total, the project was so vast that at the end of 2023, it was still 0% complete. As one of our top three contributed to projects in 2024, we are very pleased to see that over 1.2 million classifications have been submitted over the past two years and this project is now 100% complete.



As in previous years, many of the projects available to support on the Zooniverse platform are based in North America. This does reflect in the proportion of hours spent on projects by continent, as the chart below shows, with nearly half of all hours dedicated to projects in North America. Hours spent on projects in Antartica and Australasia have both increased by 2% showing that an attempt has been made to explore projects based in other continents. For 2025, we aim to diversify our contributions even further, with a particular focus on increasing contributions to conservation research in Asia and South America.

Ex-Situ Conservation Research Projects

As a wildlife park, the vast majority of the conservation research that we participate in is here at the zoo. We house over twenty species that are classified by the IUCN as endangered and critically endangered species and a further thirty-five species that are vulnerable or near-threatened. It is our duty as an exsitu conservation facility to ensure that we are promoting the health and

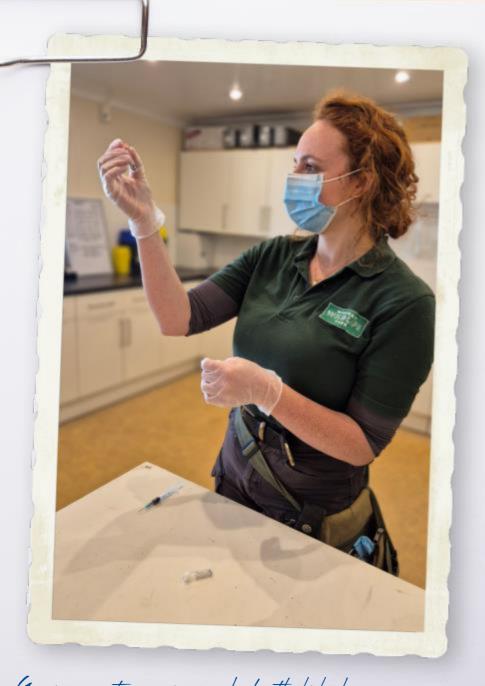
wellbeing of every animal and ensuring that the captive populations of these animals can be relied upon to secure the future of their species.

Additionally, the animals in our care can give us vital information that we simply would not be able to obtain from their wild cousins. Unintrusive studies such as behavioural observations can be carried out at almost any time and these can give valuable insight into an array of the species' preferences: habitat, diet, breeding sites, light levels, humidity and many more indicators that help conservationists to take the most effective action in the preservation of wildlife. Biological samples are also more easily obtained in a captive environment; whether that be faecal samples collected as part of routine enclosure cleans or blood samples taken as part of necessary health procedures or during postmortems. Such samples can be used for species genetic analysis, assessing suitability for breeding programmes and understanding susceptibility to disease to mention just a few examples. As such, we are committed to ensuring that our animals and their by-products are available to researchers wherever this can be facilitated ethically and without impacting animal welfare. The following research projects were all approved and carried out at Wingham Wildlife Park in 2024.

Title	Institution	Level
How Different Materials can Affect Kookaburra Station Training	Wingham Wildlife Park	Apprenticeship
Effects of Enrichment Presentation on its use in a Group of Captive Chimpanzees	Wingham Wildlife Park	Apprenticeship
Measuring Clouded Leopard Activity Levels within a Nocturnal Setting	Wingham Wildlife Park	Apprenticeship
Vietnam Pheasant Reintroduction Disease Risk Analysis	University of Edinburgh	MSc
Feeding Practices and Welfare in Giraffes Under Human Care	University of the Free State	MSc

Serotonergic Modulation of the Behavioural Divergence in Pan: A Hologenomics Approach	University of Antwerp & Royal Zoological Society of Antwerp	PhD
Allogrooming and Self-Directed Behaviour in Captive Primates	Bangor University	BSc
Determine Duration Difference between Heights and Types of Branches between Common Marmosets (Callithrix jacchus) and Pygmy Marmosets (Cebuella pygmaea) at Wingham Wildlife Park	University of Chester	BSc
An Evaluation of Seasonal Diet Changes and Weight Fluctuation in Leaf-eating Primates	Wingham Wildlife Park	BSc
An Evaluation of Seasonal Diet Changes and Weight Fluctuation in Chimpanzees (Pan troglodytes)	Wingham Wildlife Park	BSc

Wingham Wildlife Park has also been awarded silver super-submitter to the Edinburgh Hub by the EAZA Biobank for the third year in a row! Whenever biological samples such as blood, hair and tissues are collected during health-related procedures or during post-mortems, we donate any leftover from diagnostics to the EAZA Biobank and Nature's SAFE Biobank. These biobanks store samples for use in conservation research and to preserve the genetics of species at a high risk of extinction, respectively. Being a super-submitter simply means that we are contributing an above-average number of samples from a wider range of taxa than other zoos. Processing samples and packaging them correctly is a time consuming and complex challenge but with practice, we have managed to make it part of our routine. Helping other zoos to streamline their submission process and encourage more zoos to partake in submitting samples is one of the reasons that Markus Wilder, Animal Collections Curator, was invited to speak at the EAZA Conference on this topic.



Georgia, our vet, preparing samples for the biobank.

Our Achievements & Impact in 2029

Habitats & Communities

Our bird team spend part of their day documenting all of the birds which they see in the park throughout the day, which is information we collect to count species and activity as well as passing this information on to visitors on an information board allowing them to see the types of species they can expect to see at the park on any one day. Using this information, we are able to then try to manage the wild bird population as best we can.

We have been surveying the wild birds in our park for the past 3 full years now and compared to the records observed in 2023 we have managed to increase sightings in 2024 by 23,045 observations to 100,225 birds recorded.

This increase also translated to number of species which was a new record for us with 60 species recorded (up from 49 last year). Of these 16 were amber and 9 red listed. Whilst we sadly didn't host a kingfisher in 2024 as per the previous couple of years, the new species we welcomed included:

- Feral pigeon
- Goldcrest
- Greenfinch
- Hobby
- Lesser black backed gull
- Little egret
- Little owl
- Redpoll
- Sedge warbler
- Skylark
- White tailed sea eagle

Whitethroat

At the park we currently have the following items to help bring birds to the area and allow them to have everything they need for that particular time of the year. Most of these items are located in our bug garden whilst some of the bat boxes are behind the wolves and a number of bird boxes are in our yard. The number has been maintained at the same levels as in

- Bird boxes and roosts x 28
- Bird baths x 2Bat boxes x 16

2023:

- Insect houses x 9
- Bird feeder x 1

As has become tradition for us, we have carried out another of our one day bio-blitz events and this time we were once again aided by one of our local scout groups which is always amazing as these are the conservationists of the future.

In 2024 we identified 37 less species than in 2023 with just 69 species spotted, however we used different staff and as such the species identification may not have been as precise for birds in particular which were far less numerous than the previous year. Another things which makes us believe that identification may have been less accurate is that whilst the number of species has

We are already almost half way through our initial 5 year project with Vietnamese partner organisation Viet-Nature in the Khe Nuoc Trong area.	2024 saw a lot of mobilisation in the field with the camera traps purchased in 2023 being installed and also the data collected for at least the first time from these new ones which found a lot of wildlife in the area, including the crested argus which is the species we are working to protect in this area. This data and our snare removal efforts		
		being carried out by local rangers are working hard together to ensure that not only is the crested argus kept safe but also that the area is being prepared and monitored for potential Vietnam pheasant releases in the future should the area prove to be safe enough for them.	

dropped, the number of specimens seen in 2024 was 312 which is 206

more than in 2023.

As well as supporting birds and Something which is still very much a invertebrate life with things like nest work in progress however will play an boxes and feeders we have been trying important part of us helping the local to improve our park as a habitat for wild community grow is the addition of native wildlife. the nature reserve area to our new side of the park. This area is still a work in progress, however has been partially fenced and is being left to grow in by itself so that in the coming years we can come in and help it grow, strategically remove less important invasive and add more important native plant species, and finally add in an area to be used for working with our native fresh water invertebrates.

At present we have allocated and fenced just under half an acre of land

which has a natural pond, mature plant life with one tree dating back to the early 1970s and is already home to a colony of honey bees.
The new part of our park has already got a boundary fence around it which is accompanied with approximately 600 m of newly planted laurel hedging.

Animals

The park has a long history of working with confiscated and rescued animals with this continuing in 2024 through work with the Uk customs office.

Reception Centre at London's
Heathrow airport, we offered homes to
277 individual animals, with a huge
proportion of these being the critically
endangered Gooty ornamental
tarantula, to join our studbook for the
species. A number of other
Poecilotheria species tarantulas from
India were also amongst these
shipments representing more seized
endangered and vulnerable species.

In 2024, by working with the Animal

We have a licensing commitment towards carrying out meaningful research and contributing to this field, and actually it is something which, while fulfilling in our own way, we actually enjoy spending some time on. The EAZA biobank is an important resource for researchers allowing them

resources. As with every year we have

to carry out work with biological

conservation or welfare related research here at the park through partnerships with universities, other zoological institutions and also through our very successful apprenticeship scheme. We take on a number of apprentices and almost all of them so far have graduated to become full employed keepers at the park. One of

We carry out a good chunk of

also continued to give our office staff time to carry out conservation related citizen science projects.

the requirements as part of this scheme is that they produce a piece of research so in 2024 we had 3 such research projects focusing on kookaburras, clouded leopards and chimpanzees on a variety of topics including training, enrichment and

observational techniques.

Beyond this we supported a further 7 projects with all being mammal focussed and 5 of them specifically to primates.

Along with the EAZA biobank we also,

at the tail end of 2023, signed up for with a second biobanking scheme which uses cryopreservation techniques to preserve dna and is mostly focused on reproductive cryobanking. In 2024 we were able to send them reproductive tissues from 11 different animals including 2 reptiles and 9 mammals.

As always we have made biobanking biological material part of our routine veterinary procedures as well as post mortem process which had allowed us

to once again be one of the top 3 contributors to the Edinburgh biobank for EAZA with 89 samples submitted, which was 13 less than in 2023 but covered 41 species. This drop however was purely due to logistical reasons and 2025 should see the last of the samples collected in 2024 being sent off with one of the 2025 bundles.

In 2024 we managed to support 32

different citizen science projects at the park by utilising the staff working in our offices for 1 hour each per week, which is the same number of projects as 2023. This year however we only managed to facilitate 148 hours of work as opposed to the 186 hours we dedicated in 2023 due to staff shortages.

in 2025.

We continue to try and work with EAZA to ensure that we are making a contribution to their managed species programmes beyond just being a participant, and whilst this is sometimes easier said than done we have certainly remained an active part

of the conservation community.

Our current flagship British species

have continued our partnership

supporting Bristol Zoo.

which we continue to work with is the

white clawed crayfish and for 2024 we

the wild. However, we were also able to move a group of 42 young individuals to Flaming Land for their new hatchery setup.

We have however not been entirely quiet on the crayfish front as we have also been working with the East Kent

White Clawed Crayfish Group to plan for working in situ with Kentish crayfish

We have retained the number of EEP

2024 was a bit of a guieter year for us

on the cravfish front because we were

mostly growing on a small number of

crayfish to maturity allowing them to

participate in a very important study on what they get up once they return to

species committees we are part of with Markus being on the committee for the lemur leaf frog, Georgia on the smooth coated otter committee and Becky on both the pink backed pelican and spot billed pelican. This makes 3 committees, as the pink backed and

spot billed pelican programmes are run

with a shared committee.

Whilst it didn't happen until later in the

year, Markus took on the task of coordinator for the Gooty ornamental tarantula and has succeeded in tidying up the database, ready to really work on the studbook in 2025.

EAZA continues to run a small handful of programmes in the ESB bracket, with most now having been converted to the new style EEP. Between the two of these programme types we held 49 species in 2024 which is an increase of 7 from 2023 and had 14 births within these groups which is an increase of 12 from last year.

Sustainability

We continue to uphold our pledge to reduce, reuse and recycle in our park.

the environment and the sale of drinks. At the end of the day we are still a business and by selling drinks from dispensers we saw a huge drop in sales and had to combat this, however decided to move to stocking cans of drink rather than bottles which are easier to recycle. As such our drinks sold in 2024 were a mixture of dispenser cups, cans and bottles with us only counting cold drinks in this as out hot drinks have always been sold in cardboard cups.

2024 saw a bit of a strange year for us

when it came to our commitment to

During this year we struggled to find a

some of our still & sparkling water in bottles before moving to a carton and were not able to find a suitable replacement for oasis as our supplier at the time did not stock the oasis cans.
In 2024 we sold a total of 112,928 cold drinks which is just over 20,000 more than in 2023 and doesn't count milkshakes which are sold in the mandrill café. However out of this 112,928 only 8,134 drinks were served in bottles (just 7.2%) compared to over 26,000 in 2023 where plastic made up 28.3% of drinks sales.
In 2024 we stocked a total of 26 lines of

good quality canned water so still sold

plush toys in our gift shop that weren't recycled, which is 11 lines less than in 2023. Within these we sold 3,435 plush products in 2024 that weren't

recycled which is an increase of 450 from 2023, however we had made a big push in 2024 to sell the remaining stock we had from "non-eco" lines.

In 2024 non-eco lines of plush toys made up just 15% of 171 different toy lines and whilst our number of non-eco toy sales increased to shift that stock it made up just 11% of our plush sales in 2024 which is just a couple of percent than the previous year.

than the previous year.

We are able to save water which would usually have to come from the mains water system, by instead harvesting it in barrels for use in our crayfish hatchery. When this water is then changed out periodically (as long as we than the previous year.

With this combined water saving method which cycles the rainwater which would usually be lost to the ground water any way, through 2 separate purposes here at the park and is then sent back to ground water

do not have any signs of disease in the system), it is used to water some of the plants in the garden, which would otherwise be watered using mains water.

where it would have ended up with the rain anyway.

In doing so in 2024 we started with approximately 1,985 litres of water in the hatchery system carried over from 2022, however each week this was freshened up with a 10% water change

over a 12 month usage period.

In doing so we put a further 9,525 litres through the system.

All of this water going in was then each time replacing the same volume of water coming out which was being used to irrigate the gardens. Taking this into account (a job which would usually use mains tap water) we saved a further 9,525 litres from coming out of the mains this way.

In total, the volume of water which was saved from coming from the mains supply and being wasted, by double recycling rainwater was equal to approximately 19,050 litres which is equal to around 43,150 small cups of drinking water saved.

Both our general sustainability policy

and our sustainable palm oil use policy

We have policies in place which determine how we work in a sustainable manner.

were given an update in 2024 to ensure that they are as up to date as possible and fully reflect our work and goals.

We use a lot of forestry products in the park, which for a business that is constantly building and serving such a large number of members of the public and schools, using these items is

In regard to building materials and everyday consumables, in 2024, 100% of these items were certified in some way as being produced in a sustainable manner. We do not recognise just a

unavoidable. However, we made a pledge to make this usage as sustainable as possible.

single scheme as there are a number depending on the industry and where the product is from, however the main 3 which our products seem to be certified with are:

FSC (Forest Stewardship Council)
 OLB (Origine et Legalite des Bois)
 PEFC (Programme for the

Endorsement of Forest Certification) Regarding the sustainability of our biomass pellets we use AMP Clean Energy who claim to source 100% of their wood legally and by never sourcing from highly biodiverse areas. They are accredited through 16 different programmes, however none of these relate to wood sustainability. As such we cannot verify whether this part of our energy production is sustainably sourced as their biodiversity claims have not been backed up with species surveys and 100% legal does not equal sustainable

As with every year we have used 2024 as an opportunity to grow our green energy network within the park and plan to improve this even further in 2025 and beyond.

however they are due to be cleaned and potentially even upgraded should they need it. With this in mind it should be noted that this system saw a massive decrease in productivity in 2024 to 10,031 kWhs from the 2023 figure of 30,057.

Starting with our solar panels we still

have the panels on the indoor play area

and ethical.

With our reptile house system we have seen a similar but less drastic story in the second year of energy production

production of 58,630 kWhs in 2025 however we only consumed 54,160 kWhs, meaning that as well as being self-sustaining (at least during daytime hours) we also sent back 4,470 kWhs of

clean energy to the national grid. One of our longest running energy production methods is heating through the use of biomass boilers. Whilst these do involved the burning of bio matter (wood pellets in this case), they are a sustainable heating source,

for these panels. We saw the

cleaner than fossil fuels and we try to keep the carbon footprint from the pellet supply as low as possible.

heating equates to: Indoor play area; 405,310 kWhs in 2024 which is an increase of 66,404

The energy which the 3 systems we have at present producing this type of kWhs from 2023 making this our best production level since installation even though we used almost 10t of pellets less than in 2023 showing an improvement in efficiency. Chimpanzee building; 503,599 kWhs in 2024 which is an increase of 42,711 kWhs from 2023 at a material cost of around 7t of pellets less than the previous year. Giraffe & orangutan building; also saw

an increase since 2023 of 41,129 kWhs bringing the total usage in 2024 to 139,086 for this system, although we saw no improvement in efficiency this year.

Finally we also have a ground source heat pump system in our reception building which produced 26,442 kWhs of heating for that building which is a decrease of 7,986 kWhs from 2023.



OUR PLANS FOR

We are immensely proud of all we have achieved in 2024, but it doesn't end there. With even more planned in 2025, we are constantly striving to improve our commitment to wildlife conservation. Here are our plans for 2025 and beyond:

- First and foremost, as a zoological collection, our primary focus is and will be the husbandry and breeding of animals in our care – ensuring their welfare and securing the survival of these species in an ex-situ environment. We are hopeful for our first Bornean orangutan birth and lemur leaf frog tadpoles as part of their respective EEPs in 2025.
- Expand our contribution to ex-situ conservation with the
 development of new enclosures suitable for housing and breeding
 a wider variety of endangered and critically endangered species.
 We will also continue to encourage our staff to become involved in
 EEP Committees and Taxon Advisory Groups (TAGs).
- 3. In addition to point 2, when considering new species that can be housed at Wingham Wildlife Park, we will be considering species with the potential for release into the wild. We remain hopeful that we will join ZSL's breeding and release programme for both partula snails and the Socorro dove (which is an EEP managed species), as well as other programmes for species such as glutinous snails.
- 4. Work towards showcasing native species conservation within new developments in the park, demonstrating how wildlife friendly areas can be created in any form of garden and encouraging our guests to do so in their homes and/or businesses.
- 5. Continue working with Bristol Zoological Society to rear whiteclawed crayfish hatchlings and return them to wild populations in Bristol's waterways.

2025 & BEYOND

- Continue working with the East Kent White-clawed Crayfish Group to identify potential ark sites and mirror our work with Bristol Zoological Society for the benefit of Kent's white-clawed crayfish populations.
- 7. Further the work of the Gooty sapphire ornamental tarantula EEP by conducting ethical research into the genetic variability of the spiders housed at Wingham Wildlife Park and assessing the viability of the captive population in Europe. Should the captive population be viable, the potential for releasing offspring from the ex-situ breeding programme will be investigated.
- 8. Assess the information gained from data collected with Viet Nature and use this to guide decision making in the conservation of the crested argus populations in Dong Chau-Khe Nuoc Trong Nature Reserve.
- 9. Continue to develop our education provision through the expansion of native species conservation activities. For example, increase opportunities for guests to participate in the building of native species habitats (bug boxes, bird feeders etc) and planting of seeds that benefit wildlife.
- 10. Carry out a Bioblitz at the park, encouraging participation from staff and guests to generate excitement towards native species and local conservation.
- 11. Find a conservation partner in India working in the geographical areas which the Gooty ornamental tarantula is thought to be from in order to carry out surveying work for this species, allowing us to better focus our future conservation work with this species.
- 12. Investigate the possibility of purchasing and managing woodland for the sustainable harvesting of browse through coppicing as well as exploring other ways to utilise such an area to benefit local wildlife.



How Can You Help?

The vital conservation work carried out by Wingham Wildlife Park and Wingham Wildlife Park Animal Welfare (UK registered charity number 1162346) is only possible thanks to the support of our valued guests and corporate partners. We simply cannot do what we do without you!

When you visit, you are directly supporting a family-run, wildlife conservation park. Whilst making memories with your friends and family at Wingham Wildlife Park, you can be safe in the knowledge that every penny you spend goes back into the care of the animals we house and the preservation of their wild counterparts.

However, if this Conservation Plan and Impact Statement has inspired you to do more, there are plenty of ways to extend your support and be part of our mission:

- Become a member
- Hold a fundraising event

- Adopt an animal
- Sponsor an animal or enclosure in memory of a loved one
- Leave a legacy in your will.

If you are planning an event or product in support of Wingham Wildlife Park and Wingham Wildlife Park Animal Welfare, we would love to hear from you.

NEW in 2024: Corporate Partnerships

Partner with Wingham Wildlife Park Animal Welfare and show your team and your customers that your company is dedicated to the preservation of the natural world.

With over 400,000 visitors per year and up to 600 interactions per social media post, we can offer exposure of your business to thousands of potential customers who share our interest in the preservation of the natural world and engagement of our local community.

Our packages are tiered to suit a variety of businesses – large or small – and we will work with you to ensure that your package meets your needs.

	Gold	Silver	Bronze
Use of WWPAW name & logo	✓	✓	✓
Partnership certificate		✓	✓
Listing and logo on WWP website		1	✓
Quarterly e-newsletter	✓	✓	×
Social media introduction		✓	×
Acknowledgement in WWP's annual Conservation Plan		✓	×
Blog by WWP about our partnership		×	×
A4 company advert at WWP (at chosen enclosure, subject to availability)		×	×
100 discounted WWP day visit tickets		×	×
Annual Cost		£3,000	£1,000

Partnership packages run for 12 months from the date of joining. Terms and conditions apply, please visit winghamwildlifepark.co.uk/about-us/corporate-sponsorship/ for more information and to enquire.

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