

## **White-Tailed Bumblebee Presentation Notes**

### **Slide One**

Hello everyone, my name is.....and I work for the Norfolk Wildlife Trust. The Norfolk Wildlife Trust is a conservation charity. Our job is to care for and to protect nature for the future. We manage over 50 nature reserves across Norfolk. At these reserves, we try to create ideal habitats for a wide variety of nature so as to have as many different species as we possible and as many of each species as we can.

We also like to make sure that the general public has access to these beautiful places so as to raise awareness of the stunning range of wildlife Norfolk has to offer. The NWT is keen to reconnect people and nature. We try to achieve this through educating people of all ages as to the importance of the nature around us. We believe that in order to care for the natural world people need to understand it. We want everyone to be able to appreciate nature's beauty, complexity and the many benefits we gain from the natural world. All of which are provided to us completely for free. As humans we depend on the natural world for the air we breathe, the water we drink and the food we eat. It would be impossible for us to exist if it wasn't for the many jobs that nature does for us.

### **Slide 2**

This year marks a very special year for us. The NWT is celebrating its's 90<sup>th</sup> Anniversary. We are the same age as the Queen and David Attenborough

### **Slide 3**

In the History of wildlife conservation and birdwatching in the UK, few dates stand as proud as the 6<sup>th</sup> of March 1926. On this day 435 acres of marsh at Cley were bought by a group of 12 gentlemen subscribers led by Sydney Long. It was to be preserved in Dr Long's words, 'as a bird sanctuary for all time'.

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This date was not only significant because Cley's habitats and wildlife were to be preserved. It was also the formation of the Norfolk Naturalist Trust, known today as the Norfolk Wildlife Trust. We currently manage over 50 nature reserves across Norfolk, supporting a huge variety of habitats and species.

The foundation of the Trust was also the start of the County Wildlife Trust movement, which today has 47 members across the UK, each helping to protect wildlife at a local level. The Wildlife Trusts movement has been so successful that we now cover the whole of the UK.

### **Slide 5**

***Vision:*** *Norfolk Wildlife Trust seeks a sustainable environment for people and wildlife, where the future of wildlife is protected and enhanced through sympathetic management, and people are connected with and inspired by Norfolk's wildlife and wild spaces.*

The NWT is keen to deal with the relationship between people and the natural world. The NWT is particularly concerned with ensuring that nature reserves are used and enjoyed by members of the public, without compromising the special and often rare habitats found in Norfolk.

## **Slide 6**

This very much involves the concept of sustainability. This concept is wonderfully summed up by an old Native American proverb: "We do not inherit the earth from our ancestors; we borrow it from our children."

What do you think this phrase might mean?....That we should look after the earth so that it is in the same state or maybe even better when we hand it over to our children. Unfortunately we adults haven't done the best of jobs looking after the earth...

## **Slide 7**

Currently species are going extinct 100 to 1,000 times faster than background rates (background rate is the amount of species we would expect to be going extinct). The current extinction rate is the same rate as the other 5 mass extinction events in the past; this includes the extinction of the dinosaurs.

The main cause of this extinction is habitat loss caused by human activity...

In recent history, our landscapes have seen dramatic losses and declines; habitats that were once stretched for miles now exist as small isolated fragments, often surrounded by a landscape inhospitable to wildlife, dominated by intensive agriculture and urban development. Towns and cities, busy roads and railways all make it difficult for wildlife to move between safe havens. The facts and figures for habitat loss in the UK make for some pretty bleak reading...

## **Slide 8**

- Lowland meadows have decreased by 97% since the 1930's.
- The area of coppiced woodland in the UK has decreased by 90% since the 1900's
- 80% of all of the UK's lowland heathland has been lost since the 1800's
- Due to the intensification of farming practices throughout the 20<sup>th</sup> century 50% of hedgerows in the UK have been lost.

## **Slide 9**

This dramatic loss of habitat across the country has led to major declines across many species.

- 72% of the species of butterfly in the UK have decreased over the last 10 years.
- The UK has lost 44 million breeding birds since the late 1960's.
- Mammals such as the hedgehog and water vole have seen major decreases in numbers and the red squirrel is all but extinct.
- In some counties across the UK two plant species are going extinct each year!

At the NWT we aim to save Norfolk's wildlife for the future by managing our nature reserves to the best of our ability....

### **Slide 10**

The nature reserves we manage are unique and special havens, alive with birds, plants, mammals and insects. We aim to continue to protect these valued wildlife habitats. But reserves alone are not enough- Nature can't exist in a glass bubble. Wildlife needs room to move, especially in the face of climate change. Furthermore, isolated populations concentrated in a small area are more susceptible to disease and predation.

### **Slide 11**

To allow wildlife to move throughout the countryside, the wildlife trusts are working to restore, recreate and reconnect habitats at a landscape scale, creating a living landscape across the UK. The wildlife Trusts are championing and undertaking this work through our living landscape conservation schemes.

A living landscape consists of core areas of high quality habitat including our 50 nature reserves. These reserves are connected either by corridors such as hedgerows and rivers or stepping stones such as ponds, gardens, school playing fields and church meadows. This approach looks at the landscape as a whole, allowing nature to move and thrive across the entire country.

### **Slide 12**

Here's where you come in. The NWT only look after 1% of Norfolk's land. We need your help to look after the rest of it. There are many things you can do to help at school and at home. You can make bug hotels, put up bird boxes, and make sure hedgehogs can get in and out of your garden by leaving small holes in your fence, put a small pond in to your garden or school, put out bird feeders for the harsh winter months and plant a wildflower meadow. All of these small acts help to make up our living landscape.

To celebrate the 90<sup>th</sup> birthday of the NWT we have decided to focus on 9 key species and their habitats. Your school has been lucky enough to choose the white-tailed bumblebee.

### **Slide 13**

The White-tailed Bumblebee emerges early in the spring and can be seen feeding on flowers right through to the autumn. The queens can be up to 22mm and have black and lemon-yellow bands and a white 'tail'.

Unlike the honey bee, bumblebees don't die after they sting you. This means that they can sting multiple times. However, don't worry they are incredibly calm and docile. They rarely ever sting humans unless they feel threatened.

### **Slide 14**

White-tailed bumblebees' habitats can vary but they are often found in gardens and anywhere there are flowers. White-tailed bumblebees and other bees are being helped through the NWT churchyard conservation scheme and promoting pollinator friendly plants which also provides habitat for many other species.

### **Slide 15**

Bumblebees are a vitally important species to human beings. All of the food on this slide is pollinated by bumblebees. In fact, one in every three mouthfuls of food we eat in the UK is thanks to the humble bumblebee. They pollinate our crops completely for free and ask for nothing in return. Next time you see one be sure to say thanks.

### **Slide 16**

Did you know that bumblebees have smelly feet? When they pollinate a flower they leave behind a trace. This tells other bumblebees how long it has been since a flower was pollinated. That way the flower has time to generate more pollen before the next bumblebee visits it. This saves the bumblebee the time and effort of visiting a flower which is low on pollen.

### **Slide 17**

YouTuber Maddie Moates has been learning about each of our 9 for 90 species in a series of short films. Here's how she got on when she went searching for white-tailed bumblebees.