

Summary of FBHP Deer Walk held in September 2021

We were fortunate to have John Lock share with us his immense knowledge of the deer. He focused on the male deer with their different types of antlers and their approach to the ruts, especially the fallow deer (which he studied) and he highlighted differences with the red deer. We are lucky that the herds in the parks allow us to observe multi-age groups of male deer in one place and their hierarchical behaviour.

Experience tells us that the beginning of September the deer are widely scattered across the park in separate bachelor and family groups. John decided to walk to Warren Plantation on the first walk and Oval Plantation on the second, where we gathered as a group for his talk.

The fallow deer herds hangout in the same areas, even when they are chased, they will run around in circles, but come back to a similar area. In Bushy Park, there are three distinct groups - one in the woods by the Eisenhower Memorial, The Canal Plantation by Hampton hill, and the problem deer that hang out by the car park and raid picnics.



The latter group is totally habituated to humans, although this is actively discouraged by the park. Cathy (one of the park rangers) shared her observations of Limplly (so named as he was attacked by a dog). She had seen him eat 2 loaves of bread! They eat from bins and litter. John highlighted the issue that litter can have on the deer. He shared the contents of a deer's stomach that had eaten a huge amount of string. This doesn't pass through and reduces the stomachs capacity, so they can't get enough nutritious food and their overall health diminishes.



At the rut the older males fallow deer (bucks) go into the wood. Male yearlings continue to hangout (with the spikey antlers) with their mum. During the day the other smaller but slightly older males chase the female deer (doe), checking out the "talent" in the open. But the real action though happens at night. The females get pursued into the wood where the big bucks chase the smaller bucks away.

The mature fallow bucks have created a "rutting stand" which is a hollow in the woods, scented with their urine. These are like the VIP booths in a night club (analogy from John) where the females come. Here they will mate during the night with the buck.

The success of the buck can be influenced by where their stand is and which tree they are under as the doe needs to eat. For example, acorns aren't produced every year versus horse chestnut that are.

In contrast the Red deer just use brute force. They round up the hinds (females) and then guard them. A big stag (male red deer) can have 20-30 females, but his dominance may only last 2 or 3 weeks as he gets exhausted. When it's dark the other deer move in and try and steal the hinds from him. The younger ones turn up as a group and try and disrupt things and see if they can get lucky. The point of the bellowing is it tells the other stags and hinds where they are. Their bellowing gets deeper with age and so can give an indication of their size. They tend not to eat; their stomachs are empty, and they reverberate. There's a particular frequency and it is similar to a lion's roar, you can feel it as well as hear it. They wander around the park looking for potential opportunities to mate. But there's a network and they must be careful they don't go into a larger stag's area. A male deer is around 250kg and they can move very quickly, to see off an opponent. So, we should keep the recommended distance of 50m from them during the rut.

John shared some of his collection of the antlers he has got over the years (not from Bushy Park). Antlers play a key role in establishing the male's hierarchy, but they need a certain personality to go with it. For example, Junior (a buck) had an impressive set of antlers but didn't have the character to go with it. Junior had a relaxed nature and was bullied by the other males, both younger and older than him.



The Brow Tine (the point of the antler that is directly over their heads) is the dangerous bit and they try and stick it into each other. The other tines are defensive and stop the antlers moving and causing serious injury. When they lock their antlers with another buck it becomes a question of strength.

John then showed a collection from Big Whitey, another fallow deer and how his antlers changed over time. Starting with an initial small antler which was a single point. He then grew the full palmate (hand shape) structure. As the deer get older, they "go back", they regress and their teeth go, they can't eat enough food and their heart slows down. They can't pump enough blood into their growing antlers. Whitey's antlers then were much reduced in size when he was past his prime.

Both fallow and red deer lose their antlers in the spring each year. But why, was asked? They learn how to use them as they gradually get bigger. Also, they get damaged, and they need replacing. When they come off, a pink membrane forms under the antler and gradually separates it from the skull. Sometimes they are knocked off by other bucks. But normally there's very little blood.

The larger one loses their antlers first, in the case of the fallow, and the other deer can settle scores if they haven't lost theirs. They need to show their mettle if they are to hold their position in the herd. The next antler is forming underneath and will come through in few days. This is very uncomfortable for them and it is thought to be a bit like sinus and teething pain. They will continue to grow over the summer. Using all the available food and resources to do this.

When they grow, they will create a similar pattern of antler each year, but obviously getting bigger with age. Fallow deer change their coats by the season and so antlers are used as a good identifier. They grow through a little hole in the skull. Velvet covers the antlers as it grows and helps to deposit the bone. You can see the river system of the blood that takes the calcium to the tip of the antlers. Growth is dramatic and is the quickest growing bone of any mammal. As the antlers gets to its optimum size, they begin to lose their velvet. In fallow deer the younger deer lose their velvet first. The next lot are the 2-year-olds. This is very democratic as the younger ones can practice using their new antlers before the larger ones have theirs. Whereas the biggest stags (red deer) clean their velvet off first.

They need to build up the use of the new antlers. It is a bit like a new hockey stick or a cricket bat; you have to play it in, create some shock absorbency in their head, drain their sinuses and build up their neck muscles. Tendons down their neck help to dissipate the force when they clash with another male. This then reduces the chance of injury, including a broken neck.



A willing volunteer (see photo of Colin Muid our chairman to the left) put the antlers on their head and John asks them about the antlers they are holding. He says he can't see them! That's the same with the deer. They bang into things and rubbing them against things helps them to work out the size of their new antlers. Especially on softer tree branches that have come down. They sharpen them and rub off the velvet. You can see evidence of this around the park at this time of year.

Some deer don't have antlers (Hummel deer) and they can fight with their hoofs. They tend to do quite well as the other deer don't know how to deal with them. But these aren't in Bushy Park.

Thanks to John for a very informative talk and walk. He has suggested additional information can be found in the following programmes:

The Natural World on the Natures Wildest Weapons in 2 parts:

<https://www.dailymotion.com/video/x6tny8v>

<https://www.dailymotion.com/video/x6tpkya>

And for some follow up on white harts (red not fallow!) by John Fletcher

<https://www.bbc.co.uk/programmes/m000zcbm>

Plus thanks to John Rendall for sharing his photographs.