Sharing Our Spaces – impacts on wildlife during Covid-19 restrictions. June 2020

I think it is apparent to everyone that during this unprecedented time, we have all realised how precious it is to have access to free public greenspace for our health and mental wellbeing, and to allow us to continue to feel we are part of a place shared with others, even if those interactions have substantially changed. What we have seen as land managers over recent weeks is that where this greenspace is of high quality and includes varied landscapes and habitats, it is more popular than smaller, doorstep spaces. This was particularly evident when people were allowed limited outside access and needed to find places to both stimulate and soothe within walking distance.

What I think has been overlooked by so very many is that we also share our treasured greenspaces with millions of other creatures (apart from our fellow humans) and that in our rush to be outside we are affecting them in greater numbers than ever before. The combination of vastly more people trying (in most cases) to adhere to social distancing guidelines has led to every square centimetre of the park being walked over, cycled through or sat upon. And all of this has come at a time when we have had an unusually dry spring – the April showers usually bring both welcome water and a small respite for our wildlife from constant public activity.

Soil compaction and fewer worms spells trouble

Colleagues who manage nature reserves with limited public access in Surrey have reported that grass yield has dropped to 70% of normal, solely because the extremely dry weather has restricted grass growth by a significant amount. Our grasslands and meadows are similarly affected, and the issue is compounded by the compaction of the ground caused by trampling and picnicking. To look below ground for our first example: studies have shown that earthworms are significantly adversely affected by above ground trampling and compaction, with overall numbers and individual animal size both reduced. These populations may take many months to recover but that recovery won't start until the pressures ease. Our amenity grass areas won't recover until the worms do. This lack of earthworm activity restricts root growth of grasses meaning the plants themselves become smaller and weaker and more easily ripped out of the ground. The fewer grass plants we have holding the soils in place with their roots – the dustier our greenspaces will be in dry weather. This has already been noted when people have observed mowing activity in recent days - the mower clearly being followed by a large cloud of dust. Grasslands will also be far more susceptible to fire damage this year. With the ground being hard and dry, fires will travel below ground as quickly as above ground and it's easy to forget that in conditions like this a dropped cigarette stub or an abandoned glass beer bottle are just as likely to start a fire as a BBQ.

When (if?) it rains, however, the impacts of the compaction from trampling will be obvious in other ways – it is much harder for any rain we do have to percolate through to the soils below – most of it will run straight off and into surface drains, particularly if the rain is heavy and in short bursts. I'm sure we will see residual impacts of this in the autumn/winter with standing water to be expected in places where we don't normally see it and the ground generally remaining wetter for far longer after the rain stops.

Busier woodlands mean reduced nesting and food

If we turn our thoughts to our woodland and shrub areas, the increased use here, which has included both a significant increase in movement and noise, together with the physical changes (damage) from people creating new routes through ground cover and children moving logs and branches to make dens, is having a significant **impact on dead wood invertebrates and nesting birds**. The extra movement and noise from greater numbers moving through and around these areas will doubtless have affected nesting in two ways. The more secretive species may well not have nested at all – we won't really understand the impacts of this until future years when it will

become clear if overall population numbers have declined. Species such as the secretive Goldcrest are most likely to have been impacted in this way.

If birds have felt confident to nest, their ability to feed their young to fledge successfully has been affected as it will be difficult to find natural foodstuffs as a result of both the increased visitor pressure and the dry weather. I have had reports that on sites such as Wandsworth Common, birds such as thrushes are foraging for food for their young within the playground fences as this is about the only place where they aren't disturbed and where the ground remains soft enough to probe for food. What this **lack of access to food** may result in, is a longer nesting season with birds perhaps nesting 4 or 5 times throughout the year and nesting longer into high summer / early autumn. Overall the populations may remain stable if later nesting attempts are successful, even if earlier attempts result in a higher proportion of fledglings starving or dying of dehydration. Again, we mustn't forget that lack of water impacts not only plants but birds and animals as well – no rain means no puddles to drink from and not everyone can safely access / use the lakes for water.

The sudden prevalence of **den building** in our woodlands will I think be devastating for dead wood invertebrates such as stag beetles for many years to come. Many of these specialists spend several years as larvae feeding on rotting dead wood (either in standing dead tree trunks or in logs and branches on the woodland floor) and if they are disturbed, they die – meaning the time lag between activities now and when we spot these impacts could be 5-7 years ahead. A reduction in invertebrate numbers will in future years have a knock-on effect on birds and small mammals that usually feed on them. Rolling a log over carefully to see what lives there and then carefully rolling it back is a good way to educate ourselves and our children on the variety of creatures in this habitat. Picking the log up, moving it, dropping it, propping it up (exposing the usually damp side to the warmth and air which will cause it to dry out rapidly) to make a den, will render these marvellous minibeasts homeless and quite possibly trampled or dessicated to death.

Not all doom and gloom

There have been far more reports of people seeing, hearing and appreciating nature this spring. People claim to be seeing or hearing "more" of many species from the dawn chorus of birds to moths and butterflies. My personal view is that what there is more of for some people is *time* to appreciate the wildlife around them and a greater likelihood of having spent that time in a way that allows them to focus on the experience. Walking alone or with household members may well be a quieter experience than meeting up with a group of friends for an after-work picnic. People have been forced to spend time in local places – not travelling afar – at the peak of spring activity. The regular repetition of walking to or through the same spaces allows you to watch the change unfurl before your eyes. And we have been able to walk perhaps at different times of day than usual – not having to squeeze a dog walk in quickly and early before we rush "off" to work. Being able to walk in the later morning or the early evening when we might otherwise be commuting allows us a different encounter with the nature on our doorsteps.

I hope this experience has been rewarding in some way for you and that visiting our greenspaces has allowed you some small degree of escape (physical or metaphorical) during this odd and difficult time. Personally, I hope that you find ways to continue to appreciate and care for the myriad of creatures we share our greenspaces with. During this month you might wish to participate in "30 days wild" – an annual nature challenge to you from The Wildlife Trusts to do one wild thing a day throughout the whole of June. https://www.wildlondon.org.uk/news/30-days-wild. It may continue to help you to appreciate the variety of wildlife we have and to give you new perspectives on familiar landscapes.

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