The Friends of
WARNHAM LOCAL NATURE RESERVE
Registered charity (No. 1171924)
warnhamnaturereservefriends.org.uk

Response to Horsham District Council Proposal to Build 1,100 Houses on Rookwood Golf Course

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Introduction

The Friends of Warnham Local Nature Reserve (the Friends) is a voluntary organisation that has worked cooperatively with Horsham District Council (HDC) since 2006 to support Warnham Local Nature Reserve (the Reserve) through voluntary donation of commitment, time and energy.

Warnham Local Nature Reserve History and Current Status

HDC purchased the Rookwood and current Reserve land in 1986 when the A24 was upgraded to dual carriageway. The land was inaugurated as a Local Nature Reserve in May 1987 and opened in September 1988.

The Reserve's Inaugural Plaque, which remains in place, states:

"In commemoration of the purchase of this land for public use from the Lucas Family Trust by Horsham District Council."

The plaque records that the Reserve was opened by Councillor Robin McGregor, Chair of HDC, in May 1987.

This is indisputable evidence that the Reserve and Rookwood land was purchased for public use and that HDC's proposal to sell the Rookwood land for building purposes represents a breaking of trust with the people of Horsham.

Warnham Local Nature Reserve is a significant wildlife site that supports one of the most diverse ranges of species in the whole of Sussex. This is evidenced in Appendix 1 by information from the Sussex Biodiversity Record Centre[1] and by decades of naturalist observation, which demonstrate the richness of life on the Reserve.

The Reserve has Local Nature Reserve statutory status and consequently is a "material consideration" as defined in the National Planning Policy Framework[2] (NPPF). HDC, as the planning authority, has a duty to protect it from external threats.

In 1992, 5 years after the Reserve was acquired and designated as a Local Nature Reserve, a report to HDC councillors recommended that part of the land be undesignated and repurposed as part of a golf course. The course was opened in September 1996 and it is this land, which was originally part of the Reserve, upon which HDC propose to build 1,100 high density dwellings.

At the time of making this representation a change.org petition against HDC's proposal has over 3,600 supporters and this continues to rise, further demonstrating the strength of feeling against the proposal.

The Friends Position

The Friends recognise the obligation placed on HDC by national government to plan for an unprecedented increase in housing over the next 15 years. The recently published draft local plan[3] contains proposals for 9 major sites that have potential to deliver more than 1,000 dwellings each. One of these is Rookwood Golf Course, which abuts the protected green space of Warnham Local Nature Reserve.

[1] Sussex Biodiversity Record Centre - https://sxbrc.org.uk
[2] National Planning Policy Framework, February 2019, Ministry of Housing, Communities and Local Government
[3] Horsham District Local Plan 2019-36 Public Consultation (Regulation 18)

The Friends strongly oppose building on Rookwood because of the adverse impact the development will have on the Reserve both during construction and continuously when the dwellings are occupied.

It is our contention that the HDC proposal to build on Rookwood:

- Is not "Sound" as defined in the National Planning Policy Framework.
- Is not consistent with HDC's own policies[4], strategies[5] and plans[6] to protect the environment and deliver recreational green space for the people of Horsham and West Sussex.
- Is not consistent with the Wilder Horsham District Partnership[7] between HDC and Sussex Wildlife Trust that was inaugurated in November 2019. The initiative's stated objectives are:
    - **Help wildlife thrive** across the Horsham District
    - **Create networks of land that are protected and enhanced for wildlife**, **to allow habitats to expand** and for species populations to increase which will ensure that they are resilient to change
    - **Increase awareness of** actions that communities can take to improve their local natural environment and **the benefits that wildlife provides**
    - **Maximise the opportunities from protecting and enhancing wildlife to tackle climate change** and to reduce the impacts of a changing climate

Approving the Rookwood proposal would clearly show that HDC was not complying with its own policies or its statutory duty to protect the Reserve. The inevitable consequence will be a vigorous legal challenge where HDC, as the developer, has to justify destroying green land that is in its care and risking irreversible damage to one of the most biodiverse Local Nature Reserves in Sussex.

We note that the Rookwood site will only deliver 5% of the district housing requirement and that it would do so at a great cost to the environment of the Reserve and with a significant loss of green space to Horsham residents and visitors.

Building on Rookwood is a missed opportunity!

At a public consultation[8] the Head of HDC Property made clear that building on Rookwood was the only option that had been worked up for presentation to councillors. Alternative options have not been considered and the Friends wish to propose that:

- **the Rookwood land north of Warnham Road be restored to the Warnham Reserve**
- **the Rookwood land south of Warnham Road be transformed into a country park.**

We propose that HDC retain the Rookwood land as green space and extend the Reserve to the west to incorporate the whole of the northern Rookwood land. This will restore the land that was declassified in 1992 and grow the Reserve further.

The Reserve benefits and complements the town of Horsham where children and adults of all ages can get out and enjoy being in the fresh air, seeing and hearing local wildlife without having to travel many miles. Last year the Reserve had 27,000 visits. With the new Discovery Hub opening later this

[4] Horsham District Panning Framework 2015
[5] HDC Green Space Strategy 2013-2023
[6] HDC Corporate Plan 2019-2023
[7] https://www.horsham.gov.uk/climate-and-environment/wilder-horsham-district
[8] Public meeting held at 10 a.m. in Roffey Millennium Hall on 20th February 2020

year HDC are expecting visitor numbers to increase by 15%, which will also boost the economy of the town.

If the land adjacent to the Reserve is added to the Reserve we feel this will benefit the Reserve and the town by allowing residents to enjoy beautiful open spaces where they can walk and encounter the large number of wildlife species that call this home. Parts of this area can be replanted to regenerate lost woodland, which would improve the habitat for wildlife and benefit the environment. In the 2020 budget[9] the chancellor announced funding for 30,000 hectares of forest, equating to 60 million trees, which will defray part of the cost of the proposed re-forestation.

The Accessible Natural Greenspace Guidance[10] page 12 recommends a minimum of one hectare of statutory Local Nature Reserve per thousand population. The HDC Green Space Strategy[11] recognises this and features an HDC management proposal to increase the amount of land designated as Local Nature Reserve.

The Friends proposal supports the HDC management intention to increase the amount of land designated as Local Nature Reserve, however, deciding to build on Rookwood will fail to capitalise on this significant opportunity to provide the people of Horsham with a first class recreational green space.

The southern Rookwood land can be developed as public recreational space. It is well documented that green open spaces for leisure activities are imperative for our wellbeing, both physical and mental. Not everyone wants to use or can afford indoor leisure facilities. Being able to just walk among green open spaces and enjoy the outdoor living has been proven as a boost to health and wellbeing for all ages.

HDC's Corporate Plan refers to 'A cared for environment' and clearly states that success in this to be measured by:

- Prioritised protection of the environment and increased biodiversity
- Improved award-winning parks and open spaces

HDC can demonstrate that their ambitions are not just empty words by enlarging Warnham Local Nature Reserve to keep Rookwood green and by NOT proceeding with the proposed Rookwood development. Once the land is concreted it will never be green space again and the fate of the Reserve will have been irreversibly sealed by HDC.

Further information of the Friends proposal is provided in Appendix 2.

HDC Duty to Conserve and Enhance the Natural Environment

The evidence published by HDC is insufficient to enable the impact on the Reserve to be fully established and for this reason we do not consider the proposal "sound" as defined in paragraph 35 of the NPPF.

NPPF paragraph 8c establishes an environmental objective as part of achieving sustainable development that requires plans to protect and enhance our natural environment and to use natural resources prudently. Both the Rookwood land and the Reserve are natural resources and the planned development destroys one and risks serious and long-term damage to the other. We

[9] UK Budget March 2020 - https://www.gov.uk/government/speeches/budget-speech-2020
[10] Natural England "Nature Nearby" Accessible Natural Greenspace Guidance
[11] Horsham District Council Green Space Strategy 2013 - 23, page 55

therefore do not consider that the NPPF environmental objective is met by the planned development.

The NPPF refers to Local Wildlife Sites being safeguarded through local policy and decision making, however, there is no reference to such safeguards having been considered before making the Land at Rookwood proposal. This raises questions including:

- What development safeguards did HDC put in place when Warnham Local Nature Reserve was given this statutory designation?
- Do such safeguards exist?
- Were they considered before making the Land at Rookwood proposal?
- If safeguards were not considered, why was this?

The NPPF

HDC's proposal to build on Rookwood will:

- Destroy the wildlife corridors that extend from the west of the Reserve towards the open Sussex countryside. The Rookwood proposal comes very shortly after the North Horsham development was approved which will significantly reduce the Reserve's wildlife corridors to the north.
- Destroy the green space that is used by numerous avian, insect and mammalian species that live on the Reserve e.g. deer, badgers, fox, rabbit, bat as described in Appendix 1.

Paragraph 170 of the NPPF establishes a requirement that Planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, sites of biodiversity.

The Reserve land is designated by HDC as a Local Nature Reserve and has a very high recorded biodiversity (Appendix 1). The noise pollution, light pollution and water pollution from a Rookwood development will cause enduring damage to the Reserve, not only during construction but also **during the following century of human occupation**. Approval of this development is not consistent with the duty set out in the NPPF.

Paragraph 174 of the NPPF states that the Local Planning Authority should set out a strategic approach in their Local Plans, planning positively for the creation, **protection**, **enhancement** and management of networks of biodiversity and green infrastructure including the wildlife corridors and stepping-stones that connect them.

Building on the northern Rookwood land will demonstrate that HDC is not following the approach set out in the NPPF to protect the **crucial wildlife corridors** upon which the Reserve's animal and bird populations depend.

HDC Corporate Plan 2019-23

The HDC Corporate Plan 2019-23 sets out a vision and action plan to enhance the Horsham District over a four-year period. However, building on Rookwood is inconsistent with many statements made in the Corporate Plan:

- Replacing a leisure facility with housing is inconsistent with Outcome 1.2:
    - **We will provide** culture, sports and **leisure opportunities** to improve the health and wellbeing of our communities.
- Building 1,100 high density dwellings next to Warnham Local Nature Reserve is inconsistent with Outcome 1.3:
    - Both **our built and natural environments are highly valued** and will be well managed to keep our District an attractive place to live.
- At the Millennium Hall Roffey public introduction to the Rookwood Development the Property team displayed pictures of 5 storey buildings that were shown as models of what was proposed. These will inevitably be visible from the Reserve and light and noise pollution will be unavoidable. This is inconsistent with Outcome 1.4:
    - **New development should sit well with the natural environment** and be recognised for its quality by the local community
- Building on Rookwood is a missed opportunity to enhance our leisure facilities, grow our local economy and make the district more attractive to tourists. This is inconsistent with Outcome 2.3.3:
    - **Enhance our culture, leisure and heritage facilities** to attract visitors and to support the local economy.
- Building 1,100 dwellings adjacent to the Reserve will have multiple undesirable impacts on the Reserve. These include loss of wildlife access corridors, loss of open space for wildlife from the Reserve, increased light pollution, increased cat predation and increased noise pollution. Degrading the Reserve in this way is inconsistent with outcome 4.1.8:
    - **Improve the ecology, wildlife and biodiversity of our parks, open spaces and countryside**.

The corporate plan is full of laudable objectives and positive outcomes for the people who live in the Horsham district and shows that HDC is serious about improving the district for the benefit of its residents. The development at Rookwood is inconsistent with so many of HDC's objectives that it is astounding that it has been put forward as a credible strategic option. Retaining the land as green space ticks all the right boxes!

HDC Local plan proposal to build on the Land at Rookwood

Biodiversity growth

At a meeting between the Friends and HDC[12] it was stated that the number of habitats present on the Rookwood land was low and that it was expected to be straightforward to meet the claimed 10% increase in biodiversity. Furthermore, at a public consultation[8], the HDC Property Department stated that the proposal will result in a "10% increase in biodiversity" when this is calculated using a methodology based on "the number of habitats" present.

[12] Briefing by HDC Property Department to Friends of Warnham at HDC Offices 13th January 2020

The regulation 18[13] draft local plan[3] and displays at a public consultation drop-in[14] state that the HDC Planning Department has assessed the biodiversity impact of every proposed strategic site development. The "Land at Rookwood" biodiversity impact entry[3] is shown as "Neutral" and the proposal summary[3] states that the scheme will provide "biodiversity net gain".

This assessment by the HDC Planning Department must have been carried out based on information provided by the developers, HDC Property Department, but this information is not public. **The lack of this information has significantly impeded our ability to challenge the conclusions drawn either by the HDC Property Department or the HDC Planning Department**.

Any methodology based on the number of habitats is likely to provide a very low bar against which to measure biodiversity increases if, for example, rooftop gardens, internal courtyards and small open spaces and planters count as new habitats.

Given a) the adjacency of the site to a known biodiversity hot spot, b) that species inevitably range beyond the borders of the Reserve and c) that HDC are the developers, we argue that:

- **A full and detailed assessment of all species present on the Rookwood land must be carried out by a fully independent body that cannot be influenced by HDC.**
- **To ensure public confidence, this body must be of national repute and operate completely independently of the HDC Property Department who are the developers.**

This approach is necessary to ensure that an appropriate bar is set against which biodiversity increase can be measured should the site be selected by councillors in the regulation 19[13] document.

Green space distribution

The "Land at Rookwood" summary in the regulation 18 draft local plan[3] states that the development will deliver a "significant provision of open space, a woodland park and green links throughout".

However, at a meeting[12] between the Friends and HDC, a presentation of conceptual plans was shown that, from brief viewing in the meeting, suggested that the majority of housing provision will be on the northern land while the majority of the green space will be on the southern land. This appeared to be because the southern Rookwood land contains Boldings Brook and the Red River, their associated flood plain, the Riverside Walk and the current large lake.

A request to HDC to make the development presentation available to the Friends was refused[15].

Concentrating development on the northern land adjacent to the Reserve will heighten the impact on the Reserve and is precisely the opposite of what should be done. **If HDC councillors conclude that development must happen on the Rookwood land, we argue that this must only be on the southern land.**

[13] The Town and Country Planning (Local Planning) (England) Regulations 2012
[14] Regulation 18 public consultation event - Swan Walk, Horsham - 29th February 2019
[15] Written response to Friends question 3 - Brian Elliott (HDC Head of Property) - Sent to the Friends by email.

Access within the northern Rookwood land

The "Land at Rookwood" map in the regulation 18 draft local plan[3] shows an isthmus in the northern Rookwood land that connects its northern and southern parts (circled in blue in Figure 1). An image of the circled area, standing to the south and looking northwards, is shown to the right of the map in Figure 1. For scale, the current path is about 2m wide.

Figure 1 - Map of the northern Rookwood land copied from the local plan. Image of the blue circled area looking northwards

For the northern part to be viable as a strategic development, a bi-directional road has to be constructed through the isthmus. This must be wide enough to support a population of more than 1,000 people and sufficiently substantial to provide safe access for emergency and service vehicles. In addition, the developers will need to construct a cycle path and pedestrian walkways through the isthmus in order to meet the low carbon ambitions that they have set out in the Rookwood land local plan summary.

This new highway cannot be created without destroying significant parts of the Walnut Tree Plantation to the left of the image above and the of Reserve to the right. The disturbance that such a substantial and busy road will cause to the wildlife in the Reserve and the Walnut Tree Plantation is obvious. Equally obvious is how effectively the substantial highway will isolate the Walnut Tree Plantation.

Impact of the Rookwood Proposal on the Reserve

The Reserve is currently the third most visited attraction in Horsham[16] and has recently received a Certificate of Excellence[16] award. The proposed development of high-density housing (56 dwellings / hectare)[12] on land immediately adjacent to the Reserve is irresponsible and will inevitably and negatively impact the site's wildlife population and biodiversity.

The £380k Discovery Hub and Garden Project is being partly funded by a £278k grant from the European Agricultural Fund for Rural Development. The grant was awarded because the project would lead to significantly more people visiting the Reserve. The adverse impact of the proposed development is likely to result in this aspiration not being fulfilled.

[16] TripAdvisor - Warnham Local Nature Reserve 18th March 2020

The proposed plan will also have a significant detrimental impact on the visitor experience, similarly to the impact on wildlife. The Discovery Hub will open this year and the Reserve's footfall is planned to increase dramatically. If this proposal proceeds, the Reserve car park will be reduced to allow access to the housing development. This will inevitably limit the maximum number of visitors that can enjoy the Reserve concurrently and will compound the loss of green space that would follow approval to build on the Rookwood land.

The Yorkshire Wildlife Trust have documented[17] the impact of nearby settlements on their nature Reserves. Of particular note are the high impacts on sites that are less than 100m from human settlement. The northern Rookwood land easily falls within this category and the Yorkshire Wildlife Trust report significant issues from:

- **Litter and fly tipping** including general litter, unwanted furniture, building rubble, tyres chemical pollution all of which result in injury and death of wildlife.
- **Damage and disturbance from dogs and other domestic animals**. The figures mostly relate to dog fouling and worrying of animals. The figures do not include cat predation because, while it is acknowledged to occur, data was not available.
- **Anti-social behaviour on the Reserve** including graffiti, camping and barbeques.
- **Theft and destruction of wildlife and property** including cutting down and burning of trees and plants, destruction and theft of gates and fences damage to hides and spraying of herbicides on plants and destruction of trees.
- **Damage by vehicles** particularly land gouging by wheeled vehicles.

For Rookwood, these can only be mitigated by building a high fence all along the Reserve western boundary which will close wildlife corridors and ruin the character of large parts of the Reserve boardwalk, which passes close to the western boundary and that has relatively little natural hedgerow.

The proposal impacts the Reserve in many ways described below and, **cumulatively**, these significantly reduce the viability of the Reserve to carry out its statutory function as a Local Nature Reserve. Other uses of the Rookwood land, as described in Appendix 2 avoid this damage.

Nationally rare species

The Rush Wainscot moth (Globia algae) is found in small numbers on the Reserve and is a **Red Data Book species**[18]. This moth flies between August and September and prefers lakeside habitats. Its larva feed on the rushes that are abundant in the wet margins of the Reserve.

The Rookwood land provides similar habitats and it is highly credible that the Rush Wainscot moth is present on this land. From the perspective of the moth, the Reserve and the Rookwood land together form a single viable enclave. Disturbance from development on the Rookwood land, and light pollution from street lighting during occupation, could well discourage this rare moth from breeding in impacted areas. In this case the viable area will be reduced just to the Reserve and this may be insufficient to support the current viable colony.

[17] CIEEM - Bull. Chartered Institute of Ecology and Environmental Management - In Practice issue 97, September 2017 - Human Impacts on Nature Reserves – The Influence of Nearby Settlements - Fin Rylatt, Lauren Garside and Sara Robin - Yorkshire Wildlife Trust

[18] Field Guide to the Moths of Great Britain and Ireland 3rd Edition - Waring, Townsend and Lewington

Light pollution

Light and noise pollution will impact nocturnal species, including the Reserve's bat population. Boldings Brook is used by a number of bat species to hunt for food and the brook runs within 5 metres of the boundary with the Rookwood land for a substantial distance. Disturbance to the bat's ability to find and catch prey is inevitable.

Noise pollution

A recent US study[19] showed that noise levels that surpass those known to interfere with human visitor experience and disrupt wildlife behaviour, are common in protected areas.

The Reserve is already impacted by noise from the A264 and A24. Building on the Rookwood land will exacerbate this because 1,100 households must generate additional noise both night and day. In addition, noise from cars and delivery vehicles will impact nesting birds and animal movements especially the Reserve's bat population. This will also detract from our visitor's experiences when visiting the Reserve.

Water pollution

There will always be a new risk of contaminated runoff from any Rookwood development. Of course, mitigations will be put in place to reduce the risk if the development is approved. However, surely it is better to completely avoid this risk by not building in the first place. Any failure of the defences can cause irreparable damage to the Reserve. Why take the risk with a precious site with such large biodiversity?

Landscape disorientation and window strikes

With the high buildings proposed, the migratory paths of many insects and birds that come to the Reserve will be affected and there will be an inevitable increase in bird deaths from collisions with buildings[20]. In 2004 the BTO[21] estimated that 100 million birds strike glass panes in the UK each year and that, of these, 30 million birds die.

Why add this risk and menace to wildlife right next to a Local Nature reserve?

Flood risk

Warnham Millpond comprises approximately 4 hectares of the Reserve and is fed from the north by Boldings Brook and from the north east by Chennells Brook. The Millpond level is controlled by a weir and sluice gates at the southern end and discharges into the stream, which eventually flows into the Arun. The Millpond is both adjacent to the proposed development and on lower land.

The Millpond and surrounding marshy flood plain form a significant part of the flood defences of the southern Rookwood land and the housing to the north of Guildford Road between the Farthings Hill Interchange and Merryfield Drive. In addition, it controls the flow of the river, which joins the Arun near Highwood Mill. The Reserve plays a vital role in slowing down water movement under flood conditions and ensuring that downstream areas with limited capacity to deal with flood events are not overwhelmed.

Building on the natural flood plain that the Rookwood green space represents increases the risk of flooding in the Reserve. The Reserve has a finite capacity to absorb deluge flood events that now

[19] Noise pollution in U.S. protected areas - Science - 05 May 2017 - Vol. 356, Issue 6337, pp. 531-533
[20] Bird–building collisions in the United States: Estimates of annual mortality and species vulnerability Scott R. Loss, Tom Will, Sara S. Loss, Peter P. Marra - The Condor, 116(1):8-23 (2014).
[21] British Trust for Ornithology - Life's a pane for 100 million birds - BTO News - 17th March 2004

happen with increasing frequency due to climate change. Sending more water to the Reserve during these events will result in capacity being reached sooner with a consequent need to open the sluices in order to protect the Reserve infrastructure and the Rookwood housing. Inevitably this will cause issues for any development on the southern Rookwood land and the areas further downstream.

The current golf course land acts to retain and slow water movement under deluge conditions as evidenced by the substantial flooding that caused the Rookwood Golf Course to be closed for several weeks in February 2020 due to the greens and fairways being under water. Concreting over his land will increase the rate at which water can flow from the site and collect in the Reserve exacerbating its flood risk.

All the Rookwood land is classed as having a "High risk of flooding" as shown by the Flood Risk Indicators[22] returned by the HM Land Registry title search service. Paragraph 155 of the NPPF indicates that development should be directed away from areas of high flooding risk so, we think that development should be directed elsewhere to other sites identified in the local plan that have a lower flood risk. Why build on a known flood plain whose risk of flooding has already been increased by the North Horsham development when climate change tells us that we can expect an increasing rate of deluge events?

In addition, paragraph 156 of the NPPF requires strategic policies to take account of cumulative impacts. The Reserve will already be impacted by additional flow caused by the North Horsham development, development on Rookwood has the potential to direct further water to the Reserve as we enter a period of increasing weather turbulence that is likely to result in an increased number of deluge events.

We can see no evidence that HDC have taken proper account of the cumulative impacts of flooding and of climate change on the Reserve and there is no strategic flood risk assessment.

Cat predation

The Pet Population Report[23] gives the percentage of households that own a cat as 17%. On this basis, the proposed development will result in the presence of almost 200 cats that will threaten the small mammals and birds on the Reserve.

A report[24] in 2012 on the predation rate observed by cat owners in the UK revealed a predation rate of 18.3 prey per cat per year. This number however only includes the number of prey returned to the owner's dwelling and does not account for prey that are killed and consumed or that are maimed but not killed in the attack.

Using the figure of 18.3 prey per cat per year gives a **predation rate lower bound of 3,660 animals and birds killed per year**, while the actual number will be higher for the reasons cited earlier.

A Mammal Society report[25] on the scale of cat predation found that each cat predated 35 prey per year. This figure gives the **predation rate lower bound as 7,000 animals and birds killed per year**. Mammals made up 69% of the prey, birds 24%, amphibians 4%, reptiles 1%, fish <1%, invertebrates 1% and unidentified items 1%. A minimum of 44 species of wild bird, 20 species of wild mammal, 3 species of reptile and 3 species of amphibian were recorded as predated.

[22] HM Land Registry titles WSX107832, WSX107824 and WSX107832
[23] Pet Population Report - Pet Food manufacturer's Association - Annual Survey 2019
[24] Spatio-Temporal Variation in Predation by Urban Domestic Cats (Felis catus) - PLOS One 7(11) - 16/11/2012
[25] Domestic Cat Predation on Wildlife - 1997 - Mammal Society - Woods, McDonald and Harris

The threat to the Reserve's wildlife from such a proximate high-density development is extreme because cats are such effective predators and because they take such a wide variety of prey.

This is an unacceptable burden for the Reserve's wildlife to sustain in the long term and we think that the proposal should be rejected because of the protection that is due to a site designated by HDC as a Local Nature Reserve.

Wildlife corridors

The open spaces of the golf course enable a lot of the Reserve's mammals to roam for food, shelter and breeding grounds. Deer, badger and fox are all known to live on the Reserve and to use the green space to roam and forage for food. This is also important for bats who hunt here from dusk till dawn.

Originally the Walnut Tree Plantation (the Plantation) was an integral part of the Reserve until, in 1996, it was separated by a footpath that provides access between the northern and southern parts of the northern Rookwood land.

The proposed development will finalise the Plantation's separation and fully isolate it from the rest of the Reserve. The Plantation supports deer, badgers, rabbits, squirrels and many bird species. Urbanising the land and building a road, cycleway and pedestrian access between the Plantation and the Reserve will isolate the Plantation and break the current, well used, wildlife corridors that connect the two areas. Ultimately this will significantly reduce the viability of the Plantation to host wildlife and prevent foraging and access to breeding spaces.

Contaminated soil on the Rookwood land

Shortly after the Reserve was created in 1990 the Millpond was dredged to increase water capacity and to improve conditions for aquatic wildlife. The deepened Millpond is now designated as part of the Horsham / Arun flood management system.

The silt removed from the Millpond was regarded as low-grade industrial waste and was deposited across the meadows of the Rookwood land. We believe that this material may possibly contain contaminants harmful to human health.

Release of this material through airborne dust risks contaminating both the Rookwood land and the Reserve.

Appendix 1 – The Warnham Reserve - Biodiversity and Use

Since the limits of the Reserve are not confined by barriers and have connectivity with adjacent green spaces, most of the recorded species are not exclusive to the site and will range over the whole of the Rookwood land.

Since dogs are not permitted on the Reserve, to avoid disturbing ground nesting birds and livestock, there is no dog fouling within the Reserve. This is a significant nuisance at other Horsham sites and lack of fouling is welcomed by Warnham Reserve visitors.

The Reserve is held in high regard for its ecological diversity, visitor facilities and the ease with which species can be seen. In addition to those living locally, visitors are known to come from well outside the Horsham District to this unique site.

The different habitats at the Reserve include the Millpond, 'unimproved' wildflower meadow, (nationally scarce) reedbed, hedgerows, willow carr, 'wet meadow' (floodplain), both broad-leafed and coniferous woodland. These are supplemented by the open grassland, ponds, ditches, trees and hedgerows of the golf course.

Biodiversity of Species

The total number of species recorded at the Reserve to the end of 2018 was 3118. This rose to 3162 by the end of 2019 showing that 44 species new to the site were recorded in 2019!

Species include 32 mammals; 488 plants; 180 birds; 12 Amphibians and Reptiles; 594 fungi; 853 moths and butterflies; 320 beetles; 26 dragonflies and damselflies, many of which are 'protected' or 'endangered' species. In particular, all nesting birds are 'protected', as are bats and badgers.

Kingfishers are recorded almost daily visiting the Millpond and other water bodies and people travel significant distances to get a glimpse of one. They nest in sandy soil and in stream banks and the nearest sites are along the waterway complex in the southern Rookwood land. Development of this land has the potential to disrupt nest sites of this Schedule 1[26] protected species.

Warnham supports one of the largest heronries in Sussex and herons are regular visitors to the golf course ponds which provide vital additional hunting grounds.

Common Tern have nested successfully on specially made rafts on the Millpond. They fly in from Southern Africa, usually in April, and depart again in August/September.

Many waterfowl (ducks, geese, moorhens, coots, water rails, etc.) also use the ponds on the golf course and further afield on the Warnham Estate. The same is true for herons and egrets.

Birds, bats and flying insects use the hedgerows, ditches, ponds and trees of the golf course for shelter. Geese, swans, deer, etc., graze on the golf course grassland.

Badgers, deer, foxes, rabbits, weasels, stoats, etc. use the golf course margins, ditches, hedgerows and trees for cover.

Amphibians – frogs, toads, newts.

Reptiles – common lizards, slow worms, grass snakes.

Insects – butterflies, moths, bees, etc. all use the adjacent golf course as part of their habitat.

Trees, shrubs and wildflowers, self-seed, with help from animals, birds, insects, wind direction…

[26] Wildlife and Countryside Act 1981, Part 1 - Schedule 1

Fungi – release their spores which are carried by wind, insects, animals and birds.

Raptors including buzzard, kestrel, sparrowhawk, red kite are seen daily over the Reserve, golf course and surroundings. Tawny, barn and little owls are also present. Additionally, hobby, honey buzzard, osprey, merlin and peregrine have all been recorded in the last five years.

Critically endangered species – stock dove, song thrush, nightingale have all been recorded.

Bats (according to species) may forage up to 20 miles from their roosts, using wildlife corridors. The bat species recorded at Warnham include:

- ✓ Common Pipistrelle
- ✓ Soprano Pipistrelle
- ✓ Daubenton's
- ✓ Noctule
- ✓ Natterer
- ✓ Serotine
- ✓ Brown Long Eared

Activities at the Reserve

A programme of activities at the Reserve caters for both Friends members and the general public. Events for young people range from the very popular Easter Trails, Creepy-Crawly Day (timed to coincide with National Insect Week), Pond-Dipping, drop-in craft and discovery days (during school holidays).

For more mature visitors, events include guided walks, dawn chorus, illustrated talks, bird ringing and mammal demonstrations, species surveys, pond dipping for adults, fungal forays, bat walks, microscopy, photography opportunities and an annual quiz night. Additionally, volunteers run half-day sessions for flower arranging, needle felting and Christmas wreath-making. These are all well supported.

Many local groups, such as Beavers, Rainbows, Brownies, Cubs, etc., visit for their own special events, outside normal opening hours, hosted by Friends' volunteers. HDC also arranges for school visits, as part of the National Curriculum.

An annual Nature Photographer of the Year Competition (NPOTY) attracts over 300 entries. Winning entries and a selection of runners-up entries, in each of six categories, have been displayed in the Visitor Centre for two months every autumn since 2005.

The visitor centre is very popular, providing refreshment and education and engagement through video and live wildlife displays. It also inspires love for nature through the wide variety of top-class wildlife images on display.

At least two local societies use the Visitor Centre and Reserve for regular evening meetings.

Reserve Utilisation

The Reserve has 27,000 visits per annum and, for the flagship events listed above up to 300 children attend each event.

The Reserve is used mostly by people from Sussex based on information from the Friends Warnham Reserve Facebook page. However, it is clearly valued by visitors from Surrey, Kent, Hampshire, London and as far afield as Gloucester, Durham and the United States!

Appendix 2 – Friends Proposal for the Land at Rookwood

The Friends propose that Warnham Local Nature Reserve be extended westwards to encompass the northern Rookwood land and that the southern Rookwood land be redeveloped as a country park as shown in Figure 2 - The Friends proposed use of the Land at Rookwood.

Figure 2 - The Friends proposed use of the Land at Rookwood

The following proposals have been created within the short 6-week regulation 18 consultation period allowed by HDC. Consequently, the proposals are conceptual and require further work to validate and to confirm their deliverability.

Rookwood Land - North

The northern Rookwood land should now **become part of the Reserve**. This will restore the Reserve to its original size and increase it, to provide the springboard for development into one of the best nature Reserves in the South of England.

The enlarged Reserve will attract and engage the community both near and far with nature and the local environment. It will also enable HDC to evidence its commitment to conserving wildlife and protecting the natural world through the Wilder Horsham initiative with Sussex Wildlife Trust.

We recommend restoring the northern land to a wilder state by enhancing current habitats and introducing new ones to encourage a growth in biodiversity that will benefit local ecology as well as providing enhanced education and recreational facilities.

We note that this will require significant investment and that HDC was in receipt of over £7m in S106 and CIL revenue in 2018/19[27]. In addition, it is reported[28] that HDC have over £34M available to fund community projects. We argue that part of this reserve and of the annual income should be assigned to fund the long term significant re-wilding project envisaged.

Enhancing and protecting the environment

- ✓ As part of HDC's response to climate change this land offers the opportunity to plant significant quantities of trees and augment existing shrubs and hedgerows to promote wildlife. This can be carried out in conjunction with the Woodland Trust[29] who can provide trees at commercially advantageous pricing as well as access to grants and funding schemes.
- ✓ New habitats can be created, and current habitats enriched, through a combination of conservation projects and re wilding to attract more wildlife to this already species rich Reserve.
- ✓ The northern end of the Rookwood land can be used to enlarge the current flood meadow to slow down the silting up of the Millpond and provide additional water retention capacity during deluge events.

Improving visitor facilities

- ✓ The network of nature trails can be extended
- ✓ Further hides can be provided
- The Riverside Walk can be re-directed around the perimeter of the enlarged Reserve along the west, north and east sides exiting through the tunnel under the Warnham Road that joins the northern and southern areas of Rookwood land.
  - ✓ This enhances the Riverside Walk experience by replacing a significant amount of urban routing with walks through a variety of green environments.
  - ✓ Visitor safety is improved by directing people away from the busy Warnham Road.
- The Reserve's car park is already insufficient to handle current visitor peaks. The new Hub, whose construction is imminent, will bring in further people and the enlarged Reserve will increase demand further.
  - ✓ To accommodate increased visitor numbers current car parking facilities will need to be extended.
- ✓ The buildings at the north end of the site will provide improved facilities for educational events, school and youth group visits, and exhibitions.

Commercial opportunities

- ✓ Increased visitor numbers will generate increased revenue for HDC through access permits.
- Buildings at the north end of the site offer several commercial opportunities:
  - ✓ Corporate events, meeting rooms, function rooms,
  - ✓ Nature themed activity rooms
  - ✓ A café providing both hot and cold food and drink and toilet facilities
  - ✓ Opportunities for local artists and photographers to exhibit and sell their work.

[27] Horsham District Council – Authority Monitoring Report 2018/19 - Chapter 5, Table 1
[28] West Sussex County Times - 19th March 2020 - Page 9
[29] www.woodlandtrust.org.uk/plant-trees/large-scale-planting

Rookwood Land - South

This land should be **transformed into a country park** to provide additional open space for the benefit of all Horsham residents. Allocating the land in this way will relieve the pressure on both Horsham Park and Southwater Country Park, which are both heavily used.

As a country park, maintenance cost should be lower than if the space is used as an urban park and can be offset by income raised through hiring out of the current golf course buildings as a venue in centre.

It will also support the Wilder Horsham partnership by keeping existing habitats and wildlife corridors open.

Opportunities to promote better physical health and mental wellbeing include:

- ✓ Creating walking trails
- ✓ Creating cycle trails
- ✓ Creating fitness trails
- ✓ Selling fishing permits for the lake
- ✓ Returning a significant portion of the land to nature e.g. the area between the Red River and Boldings Brook
- ✓ Planting new trees to help tackle climate change
- ✓ Creating a sculpture trail with focus on the West Sussex Literacy Trail which crosses this land
- ✓ Converting the golf course club house and surrounding buildings into a venue for corporate and social events.
- ✓ Creating a child's playground
- ✓ Installing outdoor gym equipment