Protecting Richmond Park's Biodiversity in a Changing Climate

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THE BIODIVERSITY OF RICHMOND PARK

- Designated as of National and International Importance (NNR, SSSI and SAC)
- Acid Grassland and anthills
- Veteran Trees and dead and decaying wood
- Diverse range of species, including many rarities
- Value in an urban setting, a refuge for wildlife
- Access to nature





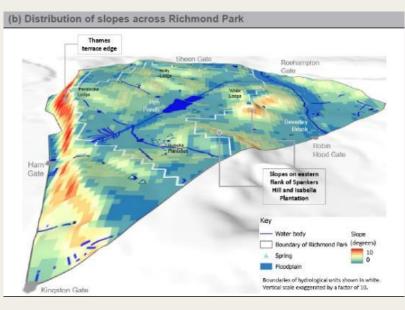






UNDERSTANDING THE PARK'S BIODIVERSITY

- Environmental surveys (e.g. hydrology and soil studies)
- Wildlife surveys
 - Wildlife recording groups
 - Citizen science
 - Formal surveys (e.g. Bat Conservation Trust, specialist consultants)
 - Research organisations



www.royalparks.org.uk



redit: Steve

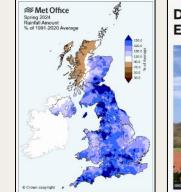
IMPLICATIONS OF A CHANGING CLIMATE

- Our climate is changing now
- 2022 July heatwave, first record exceeding 40°C
- 2024 warmest February and May on record, and the wettest Spring
- March 2025 one of the driest, high wildfire risk
- Oct December 2024 Storms Ashley, Bert and Darragh
- Trends for warmer, wetter and more extreme weather to continue
- By 2070:
 - by 2070, the chances of exceeding 40°C are similar to the chances of exceeding 32°C thirty years ago.
 - by 2070, the threshold for issuing flash flood alerts will be exceeded twice as often than in 1990.
- Implications for the park's wildlife and landscapes, and how we address these

Two examples:

- Hydrology and water management
- Tree and woodland management

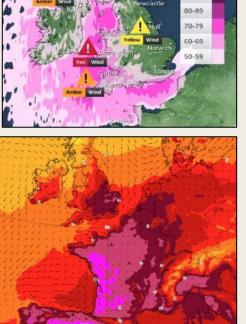




Driest March for more than 60 years in England and Wales





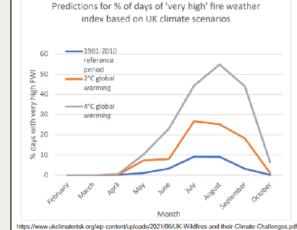


10:00 Saturday

Wind gusts (mph) >100

90-99

Met Office



WATER MANAGEMENT - 2023 ROBIN HOOD FLOODING

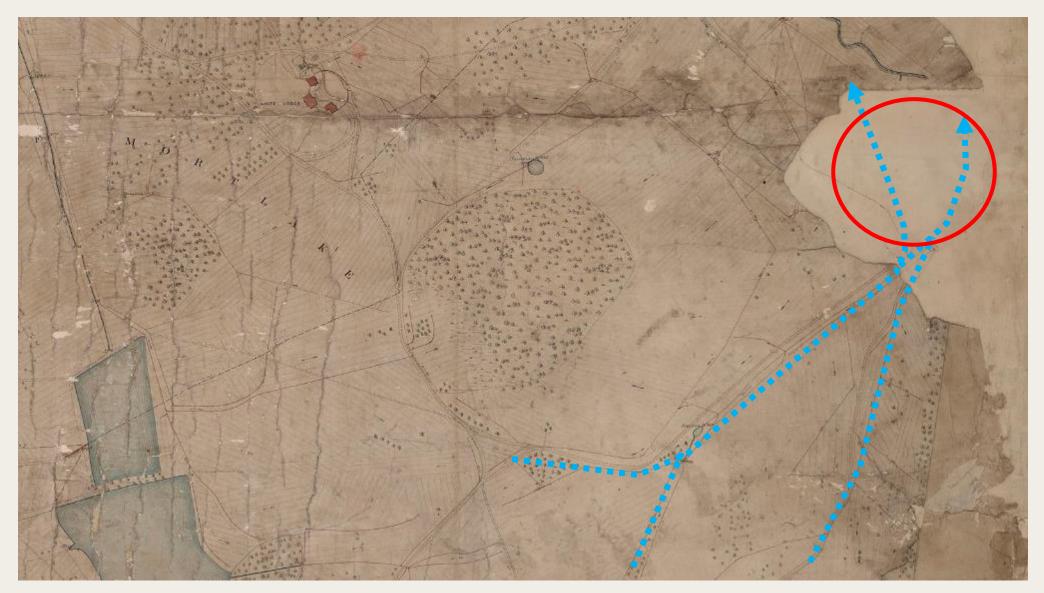
- A lot of change / potential change to consider
 - Climate
 - Condition / future of infrastructure
 - Principles of land management and understanding of nature
 - Public access and changes in use
 - Expertise for delivery
 - Biodiversity habitat condition, declining/vulnerable species, invasive species

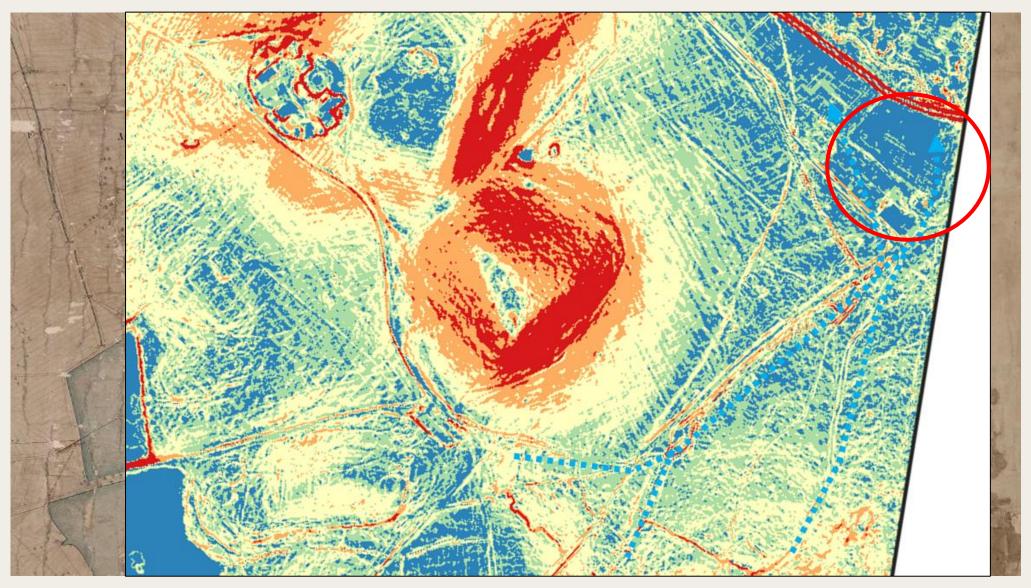












SLOWING THE FLOW- ACROSS THE CATCHMENT

- Address flood risk in sensitive locations, future proof
- Reduce flooding downstream, recharge soils for drought
- Protect vulnerable/designated habitats, invasive species
- Maintain water for deer

- Public access (Tamsin Trail, horse rides, road)
- Restore previous and enhance existing habitats
 - Target key species (e.g. Sphagnum moss, amphibians)

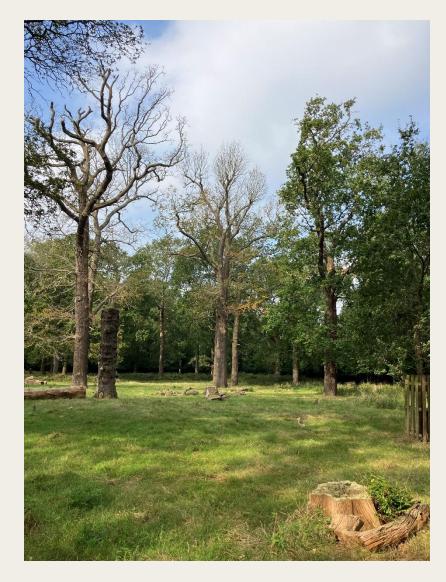




TREE MANAGEMENT - SHEEN WOOD

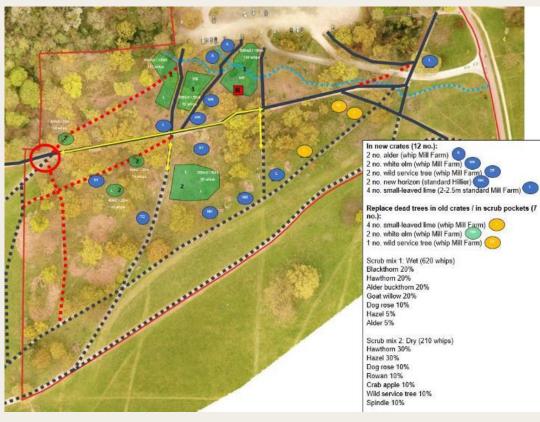
- Many trees suffering from Acute Oak Decline – a new and complex disease.
- Forest Research site importance of environmental stress in the disease
- In summer 2024, a number suddenly succumbed
- Urgent action required to address the health and safety risk
- Longer-term, risk to the park landscape and habitats – what is the future for Sheen Wood?





SHEEN WOOD- PLANTING

- New planting
 - Diversify woodland structure and select species mix to maximise biodiversity benefit
 - Planting selection to increase resilience in the face of uncertainty

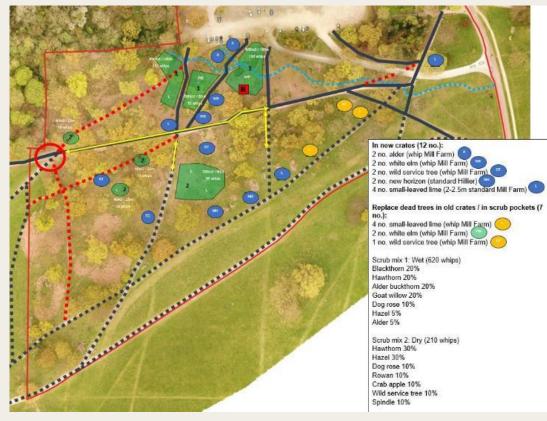






SHEEN WOOD - SOIL

- Future of existing tree canopy soil health is key
 - Reduce soil compaction, reduce footfall on roots
 - Protect scrub planting
 - Reduce waterlogging
 - Reduce risk to visitors















QUESTIONS

