8th February 2022

Launch of the OPM Toolkit

Bianca Ambrose – Oji – Forest Research

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Collaborative Research developing the Toolkit

Research contributing to Toolkit development

- Research between 2017-2020
- 38 Local Authorities including Boroughs, County and Districts
- Ranging from those with extensive experience of OPM, to those just beginning to experience the pest
- LAs listed range of different barriers to OPM management, and ways to overcome them, including:
  - Communications tools
  - Monitoring and distributional data
  - Guidance
  - Financial and other resources

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Support requested

- **Toolkit** – modular, printable, steps/process and examples
- **Resource Hub** – improved OPM manual and wider resource set

  - Procedural steps to building an OPM statement/strategy
  - Surveying strategies and managing survey data
  - The ecological impacts of OPM and the biodiversity risks of OPM control approaches
  - How to assess and apply a differentiated response to OPM depending on LA resources available and the degree of risk to humans and biodiversity
  - How to cost for OPM at strategic level and build an appropriate budget
  - Understanding legal and procedural differences on council owned and private land, including duty of care and continued use of SPHNs
  - How to interact with residents - managing expectations and communications

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Toolkit collaborative development

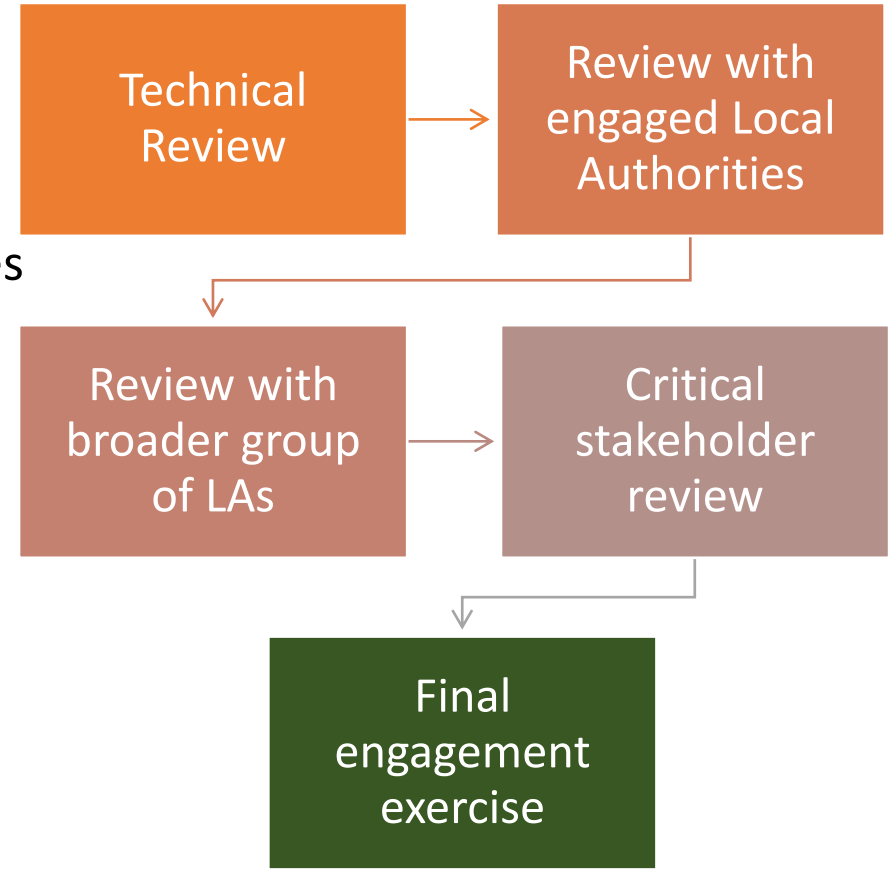
Collaborative, co-design process

Aimed to:

- Ensure Toolkit is pitched correctly and meets user needs
- Gather examples of best practice and different approaches
- Identify gaps and check accuracy
- Understand perspectives on OPM management

Consisted of:

- Phased stakeholder engagement
- Workshops and user testing
- Written comments and evaluation



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Agreeing toolkit scope and content

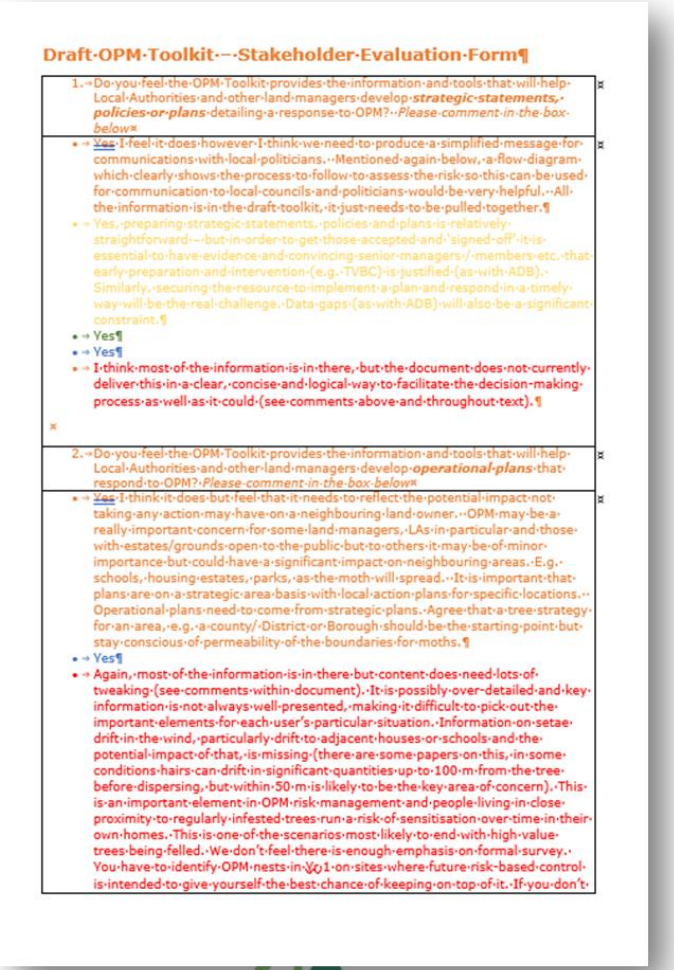
Stakeholder contributions and engagement

Over the project:

- 20+ Local Authorities
- 15+ NGOs (tree sector, land managers, conservation organisations)
- Hundreds of comments to incorporate and reflect

This has achieved:

- Robust, useful, clear guidance
- Focus on user requirements
- 7 excellent case studies



Draft OPM Toolkit – Stakeholder Evaluation Form

1. Do you feel the OPM Toolkit provides the information and tools that will help Local Authorities and other land managers develop ***strategic statements, policies or plans*** detailing a response to OPM? *Please comment in the box below*

- ~~Yes~~ I feel it does however I think we need to produce a simplified message for communications with local politicians. Mentioned again below, a flow diagram which clearly shows the process to follow to assess the risk so this can be used for communication to local councils and politicians would be very helpful. All the information is in the draft toolkit, it just needs to be pulled together.
- Yes, preparing strategic statements, policies and plans is relatively straightforward – but in order to get those accepted and 'signed off' it is essential to have evidence and convincing senior managers'/members etc. that early preparation and intervention (e.g. TVBC) is justified (as with ADB). Similarly, securing the resource to implement a plan and respond in a timely way will be the real challenge. Data gaps (as with ADB) will also be a significant constraint.
- Yes
- Yes
- I think most of the information is in there, but the document does not currently deliver this in a clear, concise and logical way to facilitate the decision making process as well as it could (see comments above and throughout text).

2. Do you feel the OPM Toolkit provides the information and tools that will help Local Authorities and other land managers develop ***operational plans*** that respond to OPM? *Please comment in the box below*

- ~~Yes~~ I think it does but feel that it needs to reflect the potential impact not taking any action may have on a neighbouring land owner. OPM may be a really important concern for some land managers, LAs in particular and those with estates/grounds open to the public but to others it may be of minor importance but could have a significant impact on neighbouring areas. E.g. schools, housing estates, parks, as the moth will spread. It is important that plans are on a strategic area basis with local action plans for specific locations. Operational plans need to come from strategic plans. Agree that a tree strategy for an area, e.g. a county/ District or Borough should be the starting point but stay conscious of permeability of the boundaries for moths.
- Yes
- Again, most of the information is in there but content does need lots of tweaking (see comments within document). It is possibly over detailed and key information is not always well presented, making it difficult to pick out the important elements for each user's particular situation. Information on setae drift in the wind, particularly drift to adjacent houses or schools and the potential impact of that, is missing (there are some papers on this, in some conditions hairs can drift in significant quantities up to 100 m from the tree before dispersing, but within 50 m is likely to be the key area of concern). This is an important element in OPM risk management and people living in close proximity to regularly infested trees run a risk of sensitisation over time in their own homes. This is one of the scenarios most likely to end with high value trees being felled. We don't feel there is enough emphasis on formal survey. You have to identify OPM nests in ¥0 1 on sites where future risk based control is intended to give yourself the best chance of keeping on top of it. If you don't

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Launch of the OPM Toolkit

Jon Stokes – The Tree Council

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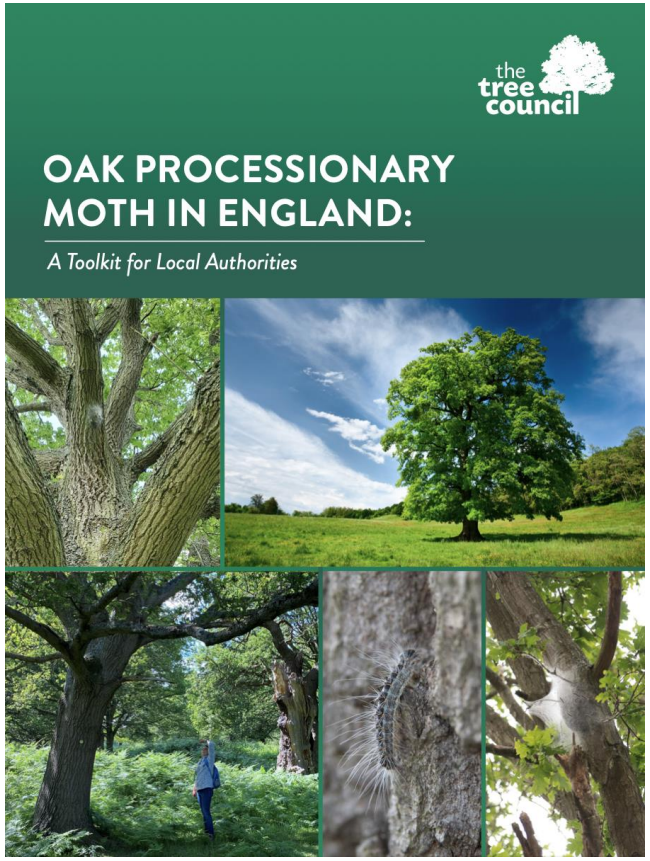
The Toolkit contents and steps



Oak processionary moth in England
A Toolkit for Local Authorities

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Oak processionary moth (OPM) is a 'notifiable pest' which was accidentally introduced into London in 2005 and has now spread across Greater London and areas of the south-east.

Whilst native oaks are well-adapted to local pests and diseases, they are increasingly threatened by those introduced from further afield, such as OPM which feeds exclusively on oak leaves.

OPM caterpillars are covered in tiny, barbed hairs, and contact with them or their nests can cause health issues in humans. This can include skin irritation and rashes, eye and throat complaints and, occasionally, breathing difficulties.

Despite efforts to eradicate the moth, it continues to expand its range, but with an informed, risk-based approach, its impact can be minimised.

Local authorities and other land managers have a crucial role to play, by managing the risks from OPM to minimise its impact on oak trees and their biodiversity, whilst protecting public health.

The OPM Toolkit will:

- Share learning and best practice from local authorities dealing with OPM
- Provide a common framework for developing a local risk-based approach (LRBA) to managing OPM
- Support the development of an OPM Action Plan where necessary
- Contribute to conserving oak trees and the benefits they provide to society
- Provide guidance on the strategic issues that a local authority or other organisation may face when dealing with OPM

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Six step approach for dealing with OPM

This Toolkit sets out a six-step approach for dealing with OPM that has been informed by the evidence and developed in partnership with local authorities who are dealing with OPM.

The six-steps provide a clear and effective way to develop a local risk-based approach (LRBA) to OPM.

- **Step 1: Raise awareness**
- **Step 2: Assess the scale of OPM**
- **Step 3: Determine the risks**
- **Step 4: Develop a local risk-based approach**
- **Step 5: Take action**
- **Step 6: Monitor and re-evaluate**

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- **Step 1 | Raise awareness**
- **IN THIS SECTION YOU WILL LEARN:**
- Preserving oak tree health
- What OPM is and why it's a threat
- The life stages of OPM
- The legal status of OPM

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Step 2 | Assess the scale of OPM in your area

IN THIS SECTION YOU WILL LEARN:

- How to determine your local distribution of OPM
- How to survey for OPM nests, caterpillars, moths

April to August
Volunteer survey
Professional survey
© Jon Stokes

April to August
Volunteer survey
Professional survey
© Forestry Commission

June to August
Pheromone trapping
Light trapping
Professional survey
© Clare Bowen / The Tree Council

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Case Studies from Guildford

Case Study 1: A structured OPM survey

In 2014, a significant OPM outbreak was discovered at Wisley Gardens in the north east of Surrey. The local authority, Guildford Borough Council (GBC), was concerned that the moth would spread more widely within the Council's area and infest council- owned trees so they conducted a structured survey to establish pest levels.

The Toolkit contents and steps

Step 3 | Determining the risk

IN THIS SECTION YOU WILL LEARN:

- The risks of OPM to organisational reputation, human and animal health, biodiversity and oak tree health
- Health risks to professionals who work with oak trees
- Potential risks of OPM management to operational budgets
- How to triage risks and create a risk-assessment plan.

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There are six main direct and indirect risks associated with OPM:

1. Reputational risk – The reputation of your organisation maybe at stake if you fail to manage OPM effectively.

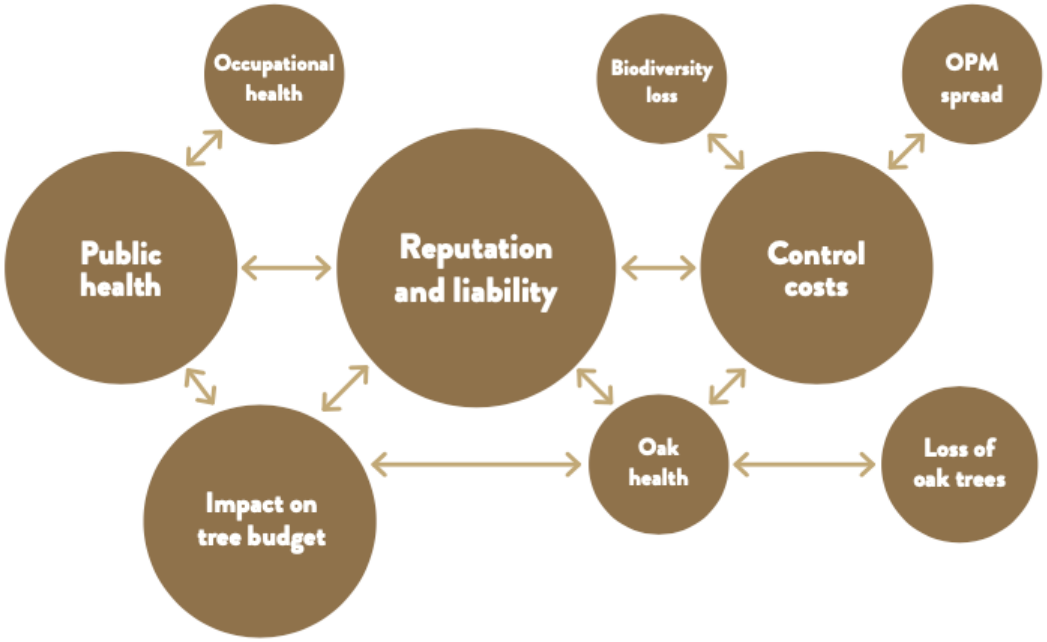
2.Economic risk - The costs of OPM management may result in significant strain on operational budgets.

3.Human and animal health – OPM can present human and animal health risks.

4.Biodiversity risk - Biodiversity can be adversely affected by certain OPM management techniques.

5.Oak health - The health of an oak can be impacted if OPM is not controlled

6.Oak loss - The felling of oak trees as a reaction to the presence of OPM



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Case Studies from West Sussex

Case Study : Pest and disease triage and risk registers

West Sussex County Council developed a ‘triage’ system to assess the risk posed by any pest or disease. The system enabled them to add ash dieback and OPM to their emerging corporate risk register.

west sussex county council

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Step 4 | Develop a local risk-based approach

IN THIS SECTION YOU WILL LEARN:

- What a local risk-based approach to OPM management is
- Why your local area plan must be tailored to your location
- How to find the correct balance between risk and outcome
- OPM management options
- Potential costs for managing OPM
- How to prepare an OPM action plan

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As a Green risk, the locally adopted course of action may be:

1. **Review national and local status of pest at least once a year to be aware of increasing threats if it spreads to your area and reassess triage outcomes.**
2. **Develop formal or informal monitoring and reporting system for OPM (e.g. via Tree Wardens), see Case Study 2.**
3. **Develop a communications plan, which includes a guidance package for staff and information for residents and the community as appropriate.**
4. **Organise site zoning or other appropriate management (if necessary).**
5. **Review annually and update action plan accordingly.**

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Site Zonation

PROS	CONS
Communication and awareness raising of OPM	Risk of increased spread of OPM
No cost of treatment except appropriate signage if used	Risk of ecological impacts if OPM causes significant decline of oak trees
OPM may reach a "natural balance" with natural enemies, and could have low long-term impacts on oak, ecosystem or human health even without intervention. The levels of harm caused by OPM in the absence of treatment in the UK are unknown.	Risk of reputational damage if OPM causes widespread damage

Nest removal

PROS	CONS
Reduces current and subsequent populations	Difficult to remove nests in upper canopies
Reduces later urticarial impacts as hairs are removed in nests	Extreme care and use of PPE required
Vacuum removal minimises operator and environmental contamination with hairs and reduces need for MEWPS or tree climbing	Costly
	Natural enemies within nests may also be removed, reducing natural build up of biocontrol
	Nest removal does not prevent defoliation and urticating hairs from earlier larval stages
	Destroying nests with blowtorches not recommended, as it causes caterpillars to eject hairs
	Capacity for significant levels of nest removal needs to have been arranged/procured well in advance of OPM season, it is unlikely sufficient capacity will be available from local suppliers if this is approached reactively.

Bacillus thuringiensis var kurstaki

PROS	CONS
Biopesticide (bacteria)	Less effective on older caterpillars, must be eaten by caterpillars to have effect
Non-persistent	Less effective in larger trees due to poor penetration into the canopy from ground-based spraying operations
Long track record of efficacy in treating OPM and other pests	Negative impact on non-target insect species

Deltamethrin (synthetic pyrethroid)

PROS	CONS
Rapid effect and longer window for effective use, single application needed	Broad-spectrum pesticide with inevitable impacts on wide variety of non-target organisms
Targeting and timing is not required to be so precise as it is toxic on contact as well as by feeding	Acutely toxic to mammals, including humans
Not considered to be very bioaccumulative or very persistent	Toxic to fish and other aquatic organisms – must not be used near to watercourses/standing water
	Moderately persistent in soil (conflicting reports of persistence)
	Considered to be dangerous to the environment with potentially severe negative impacts on non target insect species

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Step 5 | Take action

IN THIS SECTION YOU WILL LEARN:

- Where to access key information you can use with the public
- What to include in your OPM communications plan
- Useful up-to-date resources for dealing with OPM.

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The available information includes:

- **OPM Distribution Map**
- **Biodiversity Map**
- **OPM Management Options**.
- **Plan and Manage Risks Guide**
- **OPM Management Plans**
- **Communications and Events**
- **How to identify and report OPM**
- **Risks to people and animals**

OPM Management Plan

A template management plan and detailed guidance for managing OPM risks on sites with public access

OPM Toolkit

A toolkit to support Local Authorities to develop plans and take action in response to OPM.

Lepidoptera biodiversity map

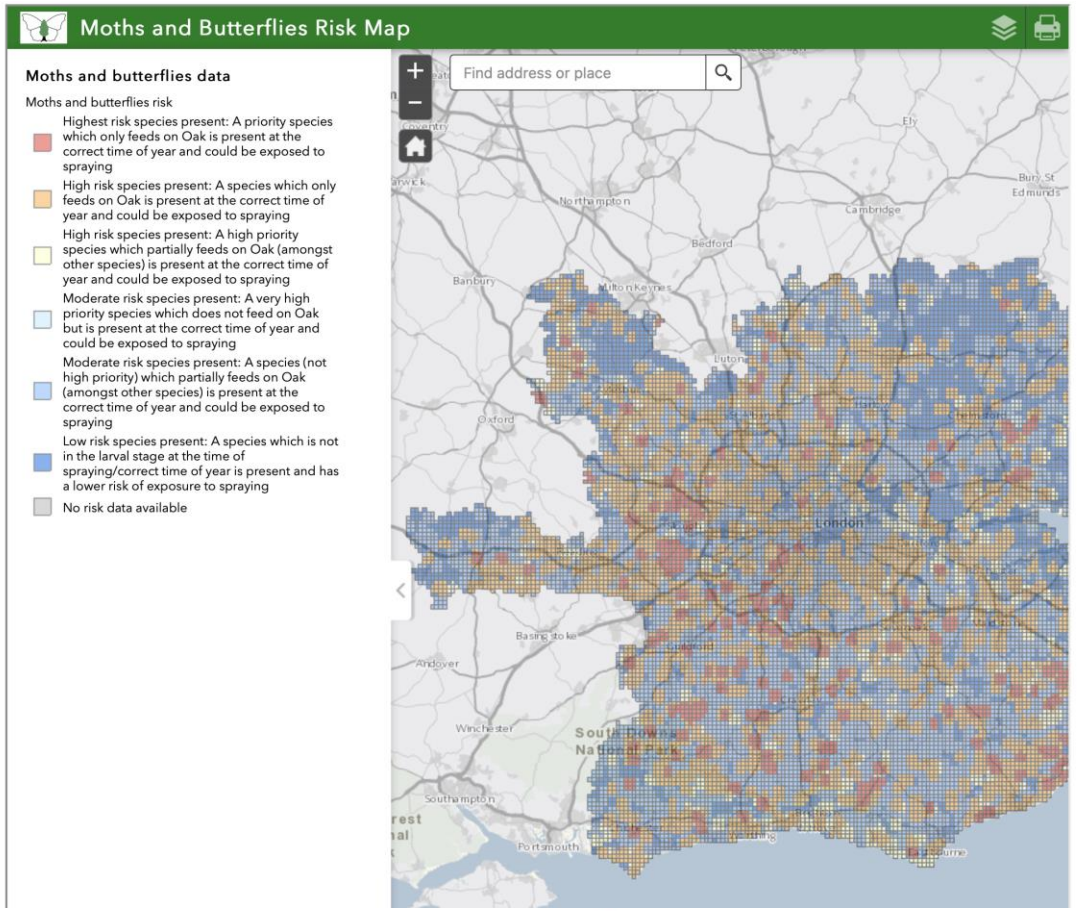
An interactive map showing lepidopteran biodiversity in OPM affected areas to guide risk management decisions.

Distribution Map

An interactive map showing the locations of recent confirmed reports of OPM and the national management zones.

Management Options

Information about different OPM management options.



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Case Studies from Hertfordshire

Case Study 7: Creating local OPM resources

Hertfordshire went from having c30 OPM nest reports in 2019 to almost 700 reported cases in 2020. To deal with the rapidly developing situation, the County Council developed four sets of resources for critical stakeholders. These include an OPM decision tree, recognition guidance for volunteers, OPM mapping and a management plan for a National Nature Reserve impacted by OPM.

Hertfordshire

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Case Studies from Hertfordshire

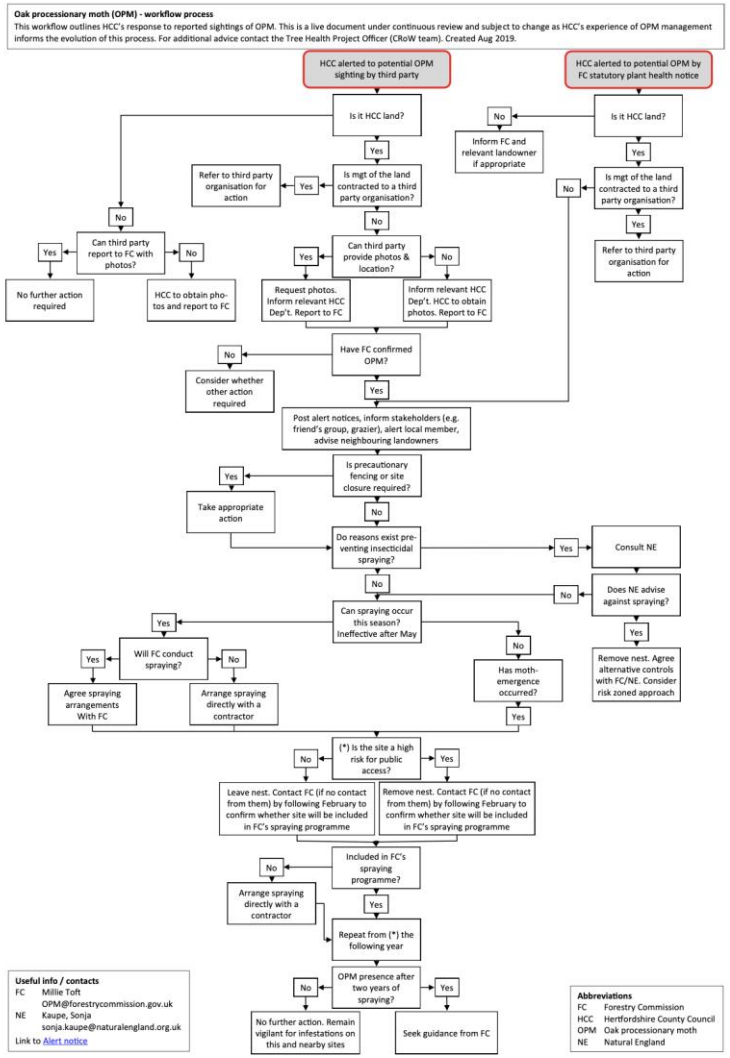
Hertfordshire County Council

- Case study - Tools and resources: 4 parts
  - A: Decision Tree
  - B: Guidance
  - C: Mapping
  - D: NNR Plan for Broxborne Woods

Case Studies from Hertfordshire

A Decision Tree

- To help inform management decisions at site level within the county to allow users to think through their options and strategies
- It is working – and was designed to help departments
- Could have been promoted and valuable more widely – if dedicated officer didn't exist



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Step 6 | Monitor and evaluate

The annual re-evaluation should:

- Monitor, review, create or amend (if necessary) existing strategies and practices, for example:
  - frequency of tree inspections (may need to be increased as OPM spreads)
  - planning policies regarding TPOs and development sites
  - biosecurity strategy.
- Consider OPM issues at a national/regional level (including new and existing research) to develop alternative management approaches and management options.
- Inspect your trees and set out priorities for which sites, or areas within a site.

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Any Questions?