

# OPM is reaching out to touch more arborists

**L**ONDON'S OPM outbreak is moving remorselessly outwards into the Home Counties to touch more and more arborists. Arb contractors not equipped to deal with OPM are now finding oak trees loaded with nests and leading some to contemplate dealing with the pest themselves.

The danger to arborists from OPM's toxic hairs is real and symptoms can be severe, causing serious dermal, ocular and respiratory problems which are cumulative following repeated exposure.

Patrick Venables, arb contracts manager for Maydencroft, cut his teeth on OPM at the Bethlem Hospital site in West Wickham (Bromley) in south-east London in 2012, while he was working for Cristwood and Toms, one of few arb contractors to deal with OPM from the outset. I recall visiting the site in summer 2012 with Mark Townsend, Patrick's manager at the time.

Patrick said he has never seen so many infested trees and nests in one place. "As I recall, the larvae had run out of oak trees to feed on and started to invade hornbeam and some other broadleaves nearby." Now, seven years on, we are about to benefit from Patrick's hard-won years of expertise in the safe removal and disposal of OPM nests.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

I asked Patrick if, in his view, arborists are aware of the nature and level of PPE required. Pointing to a list of online search results of pictures of men engaged in nest removal, posted by established companies, he said:

"The general public will look at these pictures of climbers wearing all-in-one suits and reasonably assume all is in order, but closer examination shows it is not." He pointed out how one displayed a bare neck and another, who was wearing goggles, had exposed skin around the eyes and forehead. Another, though completely covered up, lacked masking tape



▲ Typical location for an OPM nest on the underside of a main scaffold branch, and adding that little bit more difficulty for access and removal.

**WITH OAK PROCESSIONARY MOTH (OPM) SPREADING RAPIDLY, DR TERRY MABBETT VISITED MAYDENCROFT IN HERTFORDSHIRE TO SPEAK WITH ARB CONTRACTS MANAGER PATRICK VENABLES AND DRAW ON HIS SEVEN YEARS' EXPERIENCE OF SAFE NEST REMOVAL AND DISPOSAL.**

wrapped around the wrists and ankles to seal the suit.

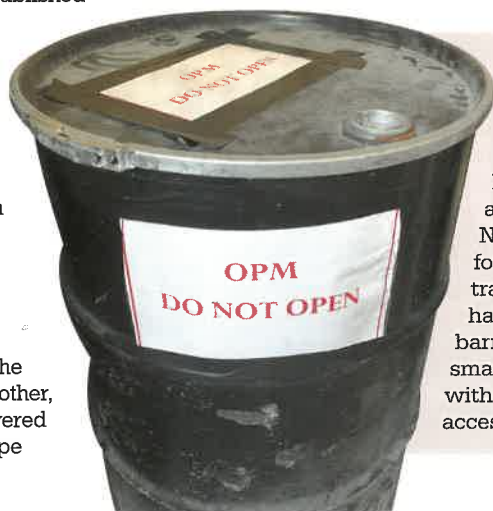
"Urticating (stinging) hairs which start to develop at the L3 (third instar) larvae, stage and are borne throughout the following L4 to L6 instar stages, are highly toxic and

barbed. What's more, nests remain full of hairs long after adult moths have exited the nest and flown," said Patrick. "Indeed, spent nests present real problems for several years. Even the smallest area of skin exposed to the hairs causes contamination and severe skin irritation problems for the operator, let alone what happens when the eyes and respiratory passages are vulnerable."

Recent reports told of people having operations to extract barbed hairs from the corneas of their eyes in Germany, where OPM was present in 'plague proportions' this year - an indication of the dangers presented by this pest.

"The effects at best are skin irritation typically requiring dual treatment with anti-histamine and steroid cream for at least a week and in most cases longer," said Patrick.

Contamination of the eyes and airways with the toxic hairs will clearly be more problematic for the patient, especially if there are pre-existing conditions such as asthma. "Not widely known are the cumulative



◀ All OPM-contaminated material is stored in U.N. drums; metal barrels designed and built to United Nations specifications for the storage and transportation of hazardous waste. The barrels are secured in a small shipping container with a restricted key access.





Patrick Venables and his highly trained teams were confronted with a number of large 'late-insect-stage' OPM nests in July and August 2019 and with no other option but nest removal and disposal.

effects following repeated exposure and contamination, with some affected arborists no longer able to carry out OPM-related work."

Asked to specify the type and grade of PPE required for nest removal, Patrick said: "An all-in-one suit of suitable thickness and quality," adding how he has tried the '£3' suits but found they weren't sufficiently strong.

"Operators should be looking to spend at least £8 to £10 per suit and dispose after one session. For instance, if the operator breaks for lunch, the suit should go for safe disposal and a fresh suit should be worn for the afternoon. With regard to gloves, we wear a double pair of Marigold household gloves, which are similarly disposed of after a single session. Taping the all-in-one suit around the wrists and ankles using masking tape is essential."

Next up was facial, eye and respiratory protection. "OPM nest removal and disposal requires a custom-designed, hooded helmet complete with neck shroud and a battery-powered fan and filtration system mounted at the back," said Patrick, adding how we are talking about £1,000 worth of specialist kit. "The other option, now outdated, is a battery-powered fan-driven filtration system mounted at the lower back with a long pipe feeding the filtered air up into the hooded helmet. However, the pipe can be easily ruptured during climbing, leaving the operator breathing in the toxic hairs."

#### NEST REMOVAL AND DISPOSAL

Patrick said: "We use a vacuum cleaner to Hoover up the nests, but not any old 'hoover'. It must have a double filtration system. Size is not especially important providing that, like the Nilfisk models, it's equipped with

Hepa-Flo filter bags so that nothing can get out from the vacuum and into the air. Some operators recommend blowtorching but we find the initial heat blast makes the hairs fly, and besides I don't think it does the trees much good."

For access to the nests, Maydencroft has a system of priorities:

- First priority is access via a MEWP using a vacuum fitted with a long pipe.
- Second is access by ladder.
- Third is climbing by rope and harness.

Though well aware of the dangers associated with inadequate disposal procedures, I was amazed at the extent to which Maydencroft and its cooperating specialist waste disposal has to go to ensure safe removal within accepted guidelines for hazardous material.

"The first thing to remember is that a contractor treats OPM-contaminated waste at a level on par with clinical waste," said Patrick. Debris and materials disposed of include nests, contaminated wood debris, all-in-one suits, gloves, hoover bags and all fabric parts of the climbing system, such as ropes and harnesses which are disposed of after one season's work.

Patrick described the disposal component of the company's OPM protocol as follows:

- All disposable materials and items are triple-bagged using heavy-duty bin bags with each one taped up.
- Triple-bagged waste is taken back to Maydencroft's depot and emptied into 'U.N. Drums', metal barrels designed and developed according to United Nations specifications for the storage and transportation of hazardous waste.
- U.N. Drums are stored in a dedicated OPM storage container, the keys to which are restricted to as few people as possible.
- When a couple of drums are full, Maydencroft's waste disposal contractor collects the consignment and removes it for incineration. This will cost in the region of several thousand pounds. Minimum amount removed at a single time is 500 kg costing



Patrick Venables

£500 to £600.

"As you can see, the whole procedure requires considerable investment and is clearly not worth it for a one-off job every now and then," said Patrick. Maydencroft carried

out nest removals and disposals at several different sites from June through to August, 2019. These included one each at Welham Green and Bushey in Hertfordshire and one in Waltham Abbey in Essex. At all, between one and three mature oak trees were found to be affected, almost certainly the result of egg laying in late summer/autumn 2018 by extra-fit female moths flying out from the London-wide infestation.

#### PROTOCOLS AND TRAINING PROGRAMMES

Patrick Venables has developed strict safety protocols delivered via an in-house company training programme. Maydencroft now has two fully trained two-man teams. "I will only train those who I know from experience will stick strictly to the protocols," said Patrick.

For arborists who still want to embark on OPM nest removal and disposal, Patrick set out four key pieces of advice:

- Training is absolutely essential.
- Are you prepared to make the required investment in the recommended equipment and the required disposal services which clearly run into significant sums of money?
- If your OPM work is likely to be periodically-arising one-off jobs then this level of investment cannot be justified.
- Safe and effective nest removal and disposal requires operators to follow protocols to the letter. If this essential requirement is met there should be no contamination problems. However, every worker should realise they could very easily take these toxic hairs home on their clothing and put their families at risk of rashes and respiratory problems.

If you are interested in finding out more, contact Patrick Venables on 01462 420851 or [patrick.venables@maydencroft.co.uk](mailto:patrick.venables@maydencroft.co.uk)



"Access by MEWP and removal by a vacuum fitted with a long pipe is the first priority option for OPM nest removal," said Patrick.

"Where restricted access does not allow the use of a MEWP then next priority option is access by ladder," said Patrick. Vacuum removal of the OPM nest on a single tree at Welham Green in the Welwyn and Hatfield district of Hertfordshire in mid-June, 2019.