

Advancements in remote monitoring for pests in museums

An Information Services and Property and Facilities Management Research project in conjunction with Insects Limited

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Can remote pest monitoring be a useful addition in the British Museum?

Insects Limited. Sight Trap and Foresight IPM software

The screenshot shows the Insects Limited website. At the top, there is a navigation menu with links for Home, Identify Your Pest, Who We Serve, Resources, SightTrap, and Contact. On the right side, there are links for Login and a blue button labeled STORE. The main content area features a large image of various pest control products, including traps and pheromone lures. Overlaid on this image is the text "Quality Pheromones and Trapping Systems" in a large, white, serif font. Below this, in a smaller white font, it says "Insects Limited manufactures and sells pheromone lures and traps for insect pests of dried food, textiles, grain, carpets, taxidermy, and tobacco." At the bottom of the image, there is a blue button with the text "BROWSE PEST PRODUCTS".

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How much do we monitor in the British Museum?

- The British Museum currently has over 1000 pest monitors across three sites including galleries, stores, workshops and laboratories
- Currently managed by the IPM Manager and monitoring undertaken quarterly by the Conservation and Collections Care Team.
- Non-collections areas currently have over 70 Monitors managed by a sub-contractor who in turn is managed through the Soft Services contractor.

- Do we have an opportunity to reduce the workload but maintain the data capture and standards for collections care?
- Can we use some other technology to take over in targeted areas?

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Can be configured into two arrangements, with or without pheromone lure. These are ideal where access is limited or where there is an ongoing concern





Hanging monitors
ideal for webbing clothes moth




Floor monitors
for crawling insects

Programmed and set up
via mobile phone app and Wi-fi

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A few Locations in Galleries
SEG, Islamic G43, Greek and Roman

10 monitors as part of the research project


Nero East
Suspended behind curtain

Nero West
Floor mounted
behind statue

Islamic Gallery 43
behind showcase

G&R Inside SC plinth

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ForesightIPM (Software)



- Data center
 - Insect counts, trending, pictures, history, environmental conditions
- Accessible by website or phone app
- Create accounts, locations, users, and spectators
- Downloadable reports

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FORESIGHT IPM ACCOUNTS TRAPS TEAM SETTINGS LOGOUT

The British Museum / The British Museum / WCEC Sector H

Active Traps

Find Trap

[Create Report](#)

TRAPS	TODAY	THIS WEEK	THIS MONTH	TOTAL COUNT	LAST MAINTAINED	ALERT	BATTERY
G43 Islamic Gallery Behind wall panel 56.d5.0a.a6.f7.55	0	0	0	0	2021-06-30 08:20:48		
G43 Islamic SC 16 56.d5.0a.a6.8c.38	0	0	0	0	2021-06-30 08:25:59		
G43A Wall Panel from 23rd July 56.d5.0a.a6.28.3d	0	0	0	0	2021-07-23 10:19:34		
G70 Greek and Roman SC 31 56.d5.0a.a6.65.5d	0	0	0	0	2021-08-25 08:17:33		
G71 Greek and Roman SC19 56.d5.0a.a6.b4.e3	0	1	4	4	2021-06-30 08:49:30		

Show more

5 of 9

Location Address

WCEC Sector H
London
London, IN 55555

[EDIT](#)

Location Contact

Sample Sample
Sample@britishmuse...
(555) 555-5555

[EDIT](#)

Note alarm status

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FORESIGHT IPM ACCOUNTS TRAPS TEAM SETTINGS LOGOUT

The British Museum / The British Museum / WCEC Sector H / G71 Greek and Roman SC19

G71 Greek and Roman SC19

[View](#) [Send Report](#)

Insect Count

When last seen: 1
Underneath boards: 4
Against boards: 5
Other: 3
TOTAL: 13

[OVERVIEW](#) [TRENDS](#)

Battery Status

Battery Charge: 77%

Lure Status

All Green (Working)

History

Initial set-up: 08:50:2021
Lure replaced: 00:00:00

[DOWNLOAD](#)

Placement

Where is Sight Trap?
Underneath SC
Occupant status of a shelter:

[EDIT](#)

Trends

INSECT COUNT RANGE OVERLAYS ADD TRAP CUMULATIVE

Environment

Wall Recent Temperature: 83.3°
24 Day Average: 79°
55 Day Average: 74°
Wall Recent Humidity: 51%
24 Day Average: 49%
55 Day Average: 58%

SightTrap Images

2021-08-02 00:17:11 2021-08-01 00:16:18 2021-07-31 00:19:21 2021-07-30 00:30:30 2021-07-29 00:21:21

Most Prevalent

Other: The largest insect of the infestation.

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Benefits and Opportunities

- Contactless monitoring
- Monitoring in hard-to-reach areas
- Monitoring critical areas
- Freeing up time for IPM by reducing trap checking
- Corrective actions
- Predictive forecasting
- Seeing is believing
- Can be used in galleries and stores
- Ideal for hard to reach areas
- Used in areas where the trend needs to be established
- The environmental data in the sight trap where the problem is based, is an important step towards dealing with the problem