

SERVICE REPORT 3

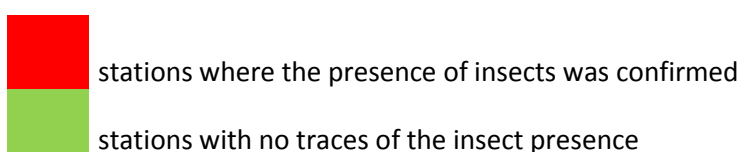
NOTES:

1. Information on the monitoring of drugstore beetle (*Stegobium paniceum*) and the impact of chemical treatment on the pest activity can be found in the report summary.
2. Appendix 1 – Insect activity trend.

SERVICE INSPECTION TABLE THIRD SERVICE PERFORMED ON: 07/2014

ROOM	NO. OF THE MONITORING STATION / TOTAL NO. OF INSECTS CAUGHT (M – MUSEUM BEETLE, S – SILVERFISH, C – BROWN CARPET BEETLE, D – DRUGSTORE BEETLE, BC – BLACK CARPET BEETLE)									
1. Storeroom 213 2 nd floor	1	2	3	4 1 M	5 1 M	6 6 M	7 1 C	8 3 S 1 M	9 2 M	
2. Storeroom 209 2 nd floor	10 1 M	11 2 C 1 M	12 1 S 5 C 2 M	13 2 M	14 1 C					
3. Musical Collection Storeroom ground floor	15 1 S 1 M	16 no station	17							
4. Storeroom 28 Music Studio ground floor	18 6 S	19 1 C 1 M	20 1 M	21 8 S	22					
5. Storeroom 111 Silesian-Lusatian Collections 1 st floor	23	24	25 1 M	26 1 M	27 1 C 1 M	28	29			
6. Storeroom 106 Library Collections 1 st floor	30	31	32 6 C 1 BC							
7. Storeroom 120 – Manuscript Division 1 st floor	33 2 D	34	35 2 M							
8. Storeroom 122 A Manuscripts Division 1 st floor	36									

9. Storeroom 122 Manuscripts Division 1 st floor	37 2 M 3 C								
10. Kitchen of the Reprographic Studio ground floor	38 1 S								
11. Conservation Studio	39a 2 S	39b 4 S							
12. Cellars	40	41 4 S							
13. Cellars	42	43	44 no station	45	46	47a	47b		
14. Cartographic Studio ground floor	48	49 no station	50 1 M	51	52	53			



1.

In storeroom 213 (2nd floor) the activity of museum beetle (*Anthrenus museorum*) larvae was confirmed at 5 out of 9 stations. In total, the presence of 11 museum beetles (as larvae) was confirmed.

In one of the stations, presence of 3 silverfish was confirmed. In another station, 1 larva of the brown carpet beetle was caught.

2.

In storeroom 209 (2nd floor) the presence of museum beetle larvae was confirmed in 4 out of 5 traps, in the total amount of 6. In one trap, 1 silverfish was caught. At 3 stations, brown carpet beetle larvae were caught in the total amount of 8.

Photo 1: *Attagenus smirnovi* (larva)



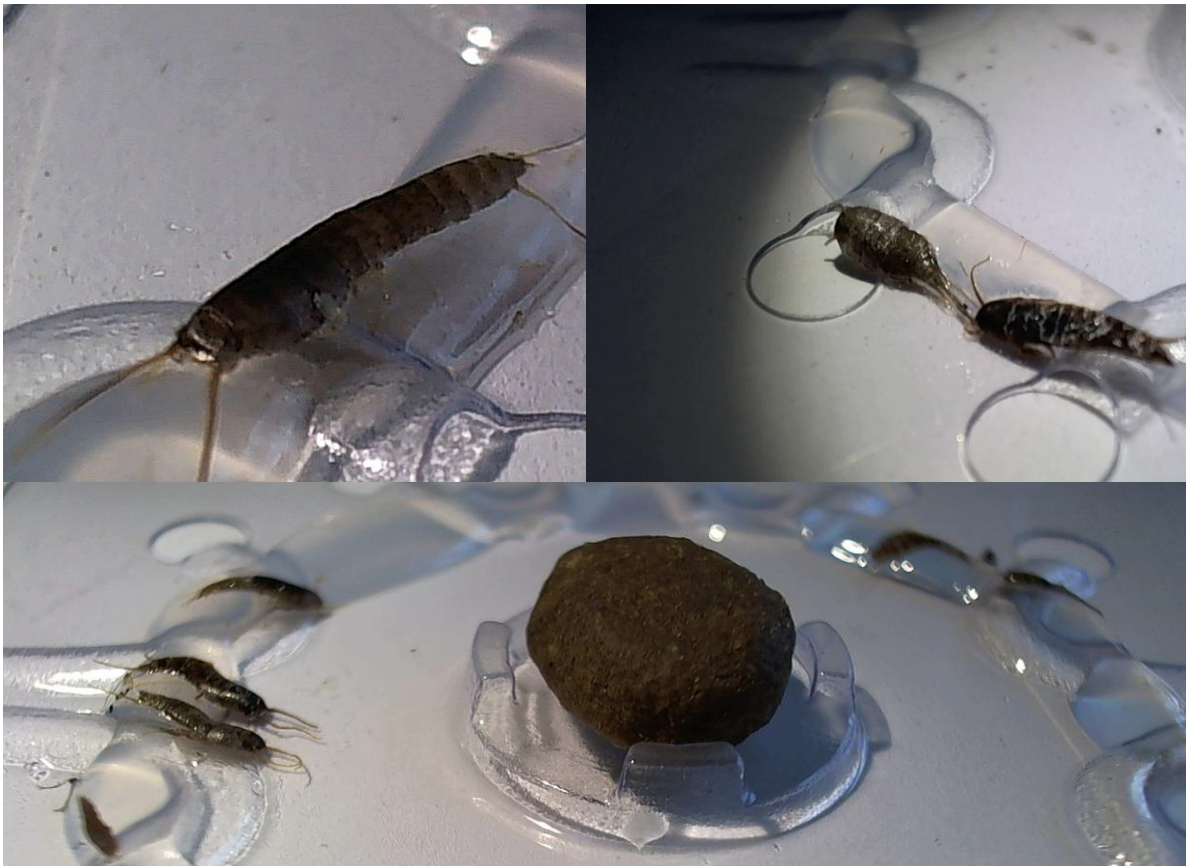
3.

In the musical collections rooms 28, at the single monitoring station, 1 museum beetle and 1 silverfish were found.

4.

In storeroom 28 (ground floor) the activity of silverfish (*Lepisma saccharina*) was confirmed – 14 insects found at 2 monitoring stations. At 1 monitoring station, a brown carpet beetle larva was discovered, while a museum beetle larva was found at 2 stations.

Photo 2: *Lepisma saccharina*



5.

In Storeroom 111 (1st floor) the activity of museum beetle was confirmed – 3 insects were found in 3 traps, and 1 brown carpet beetle larva in 1 trap.

Photo 3: *Anthrenus* (larva)



6.

In the Conservation Studio (ground floor), the presence of silverfish was confirmed in both traps, in the total amount of 6 insects.

7.

In storeroom 106 (1st floor) high activity of brown carpet beetle (6 insects) was confirmed and one black carpet beetle (*Attagenus unicolor*) was found.

Photo 4: *Attagenus smirnovi* (larva)



Photo 5: *Attagenus unicolor* (beetle)



8.

In storeroom 120 (1st floor) a new dangerous pest of the collections was found: the drugstore beetle (2 insects), as well as 2 larvae of the museum beetle.

Photo 6: Drugstore beetle – *Stegobium paniceum* (beetles)



9.

In storeroom 122 (1st floor), the presence of 2 museum beetles and 3 brown carpet beetles was confirmed.

10.

In the cellars, minimal activity of silverfish was confirmed. Four silverfish were caught at only 1 monitoring station out of 8 stations set up.

11.

In the Cartographic Studio rooms (ground floor), the presence of museum beetle larvae was confirmed (1 larva at 1 monitoring station). No insect activity was confirmed in the 4 other traps.

12.

In the kitchen of the Reprographic Studio (ground floor) 1 silverfish was found at the monitoring station.

Summary:

The monitoring has shown the activity of the silverfish (*Lepisma saccharina*) – **the insects were caught in 8 traps in the total amount of 30 – almost 6 times fewer compared to the last service** and the museum beetle (*Anthrenus museorum*) – **the insects were caught in 18 traps in the total amount of 28 – 16 insects fewer** compared to the last service. **Twenty-one brown carpet beetle larvae (*Attagenus smirnovi*) were caught at 8 stations – a 2-fold increase; also discovered were: 2 adults of the drugstore beetle (*Stegobium paniceum*) and 1 black carpet beetle (*Attagenus unicolor*).**

1. The monitoring has shown a much lower activity of the insects in all the rooms where chemical disinsection had been carried out. Only in the highly humid (80%) cellar

room, the result of the chemical treatment was limited. Low activity of silverfish was confirmed there. In storeroom 111, a decrease of the museum beetle larvae activity was found.

2. The monitoring traps have shown a higher activity of the brown carpet beetle compared to the last service.
3. The traps have also indicated the presence of the brown carpet beetle larvae in the rooms where their activity had not been observed to date.
4. The traps have shown the activity of another dangerous pest of museum collections: the drugstore beetle and the black carpet beetle (*Attagenus unicolor*).

1. The larva of the drugstore beetle is a dangerous pest of any food products stored in apartments and warehouses. It also infests library and museum collections, its strong mandibles destroying paper, cardboard, bookbinding glue and even leather. It makes irregular boreholes in food products and books, and grazes inside, contaminating them with its feces in the form of yellowish dust. Due to the concealed lifestyle of the drugstore beetle larvae, its presence is usually observed late.
2. Larvae of the black carpet beetle (*Attagenus unicolor*) cause substantial damage in enclosed rooms, grazing on wool, silk, silkworm cocoons, feathers, bristle, horn work, fur, powdered milk and eggs, as well as on other dry materials containing substances of animal origin. The larvae also cause serious damage in zoological museums.

Appendix 1

