

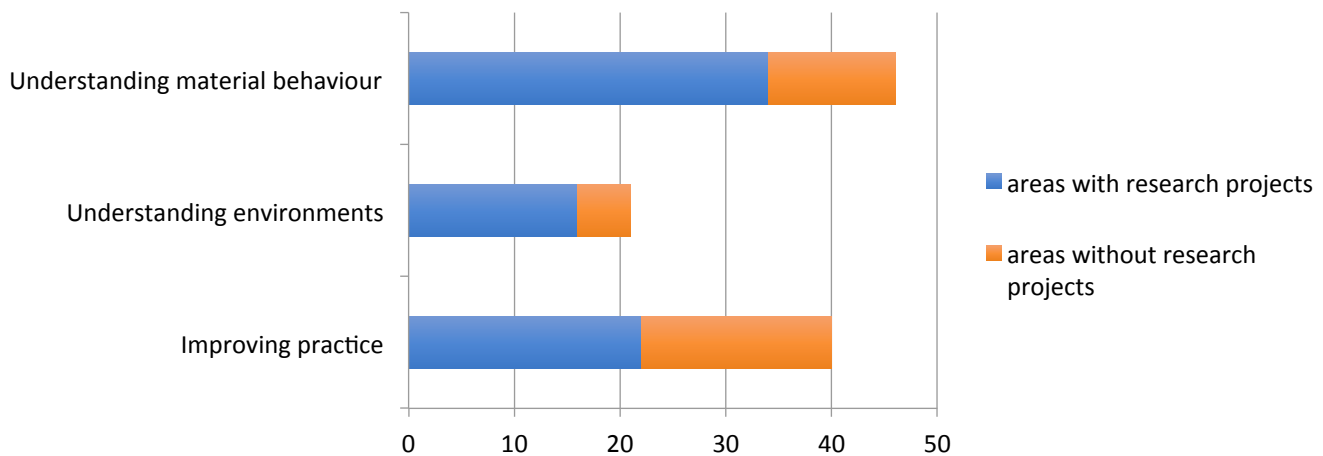
Filling the Gaps

In 2015, the National Heritage Science Forum (NHSF) initiated a programme of research 'Filling the Gaps' to find out how the gaps in knowledge and practice that had been identified under the three research themes in Report 1 had been addressed by research projects carried out since 2009.

Report 1: The role of science in the management of the UK's heritage: gaps in knowledge and practice

3 themes **7** topics **107** research areas

Understanding material behaviour	2 topics; 46 research areas
Understanding environments	2 topics; 21 research areas
Improving practice	3 topics; 40 research areas

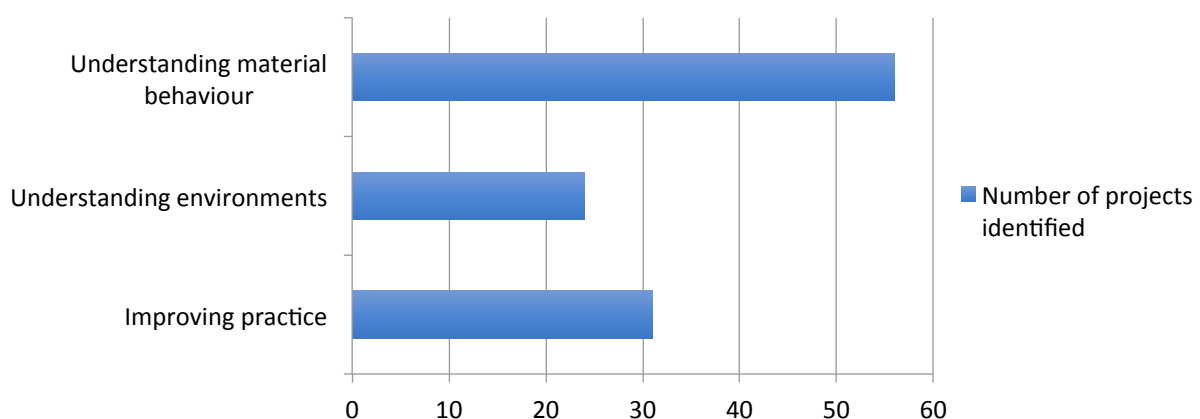


'Filling the Gaps'

111 projects have been identified so far for 72 of the research areas.

3 themes **111** projects **72** research areas

Understanding material behaviour	2 topics; 56 research projects
Understanding environments	2 topics; 24 research projects
Improving practice	3 topics; 31 research projects

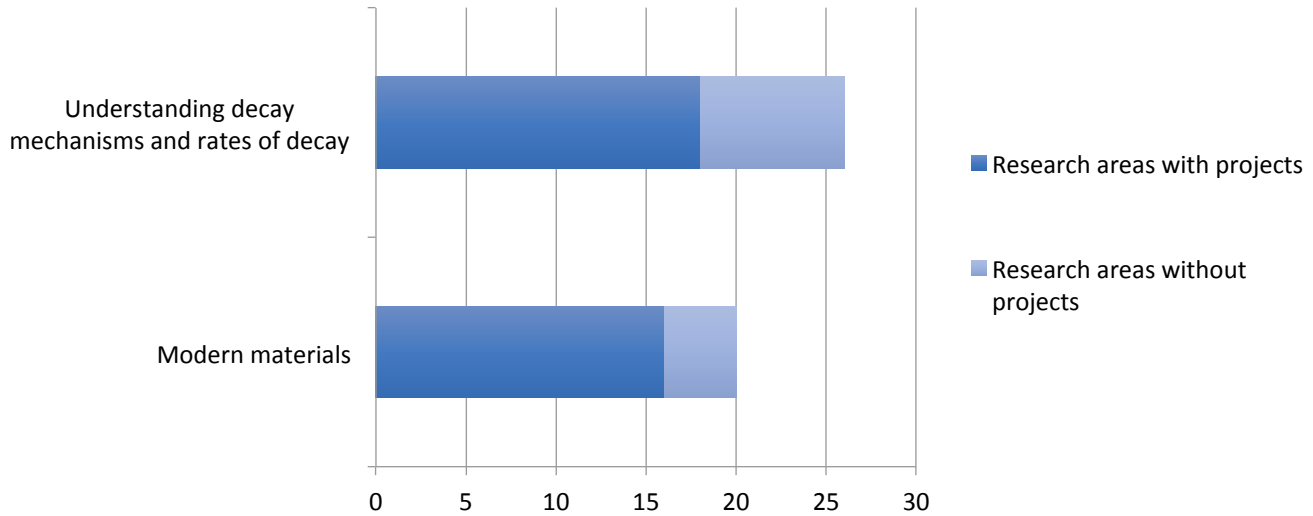


Theme 1: Understanding material behaviour

Two topics

1A Understanding decay mechanisms and rates of decay

1B Modern materials



1A Decay mechanisms and rates of decay: 28 projects were identified which mapped against 18 research areas, leaving 8 research areas unaddressed.

For this topic, research areas are linked to three subdomains of movable items, the built historic environment and archaeology. The 'Filling the Gaps' exercise revealed more research (or better knowledge about the research carried out) on movable items than the other two subdomains.



17 projects
on movable
items

Addressing 8/11 research areas



6 projects
on the built
historic
environment

Addressing 5/7 research areas



5 projects
on
archaeology

Addressing 5/8 research areas

1B Modern materials: 28 projects were identified which mapped against 16 research areas, leaving 4 research areas unaddressed.

For this topic, research areas are linked to two of the three subdomains (movable items and the built historic environment). Again, the 'Filling the Gaps' exercise revealed more research (or better knowledge about the research carried out) on movable items.



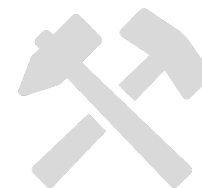
17 projects
on movable
items

Addressing 11/13 research areas



11 projects
on the built
historic
environment

Addressing 5/7 research areas



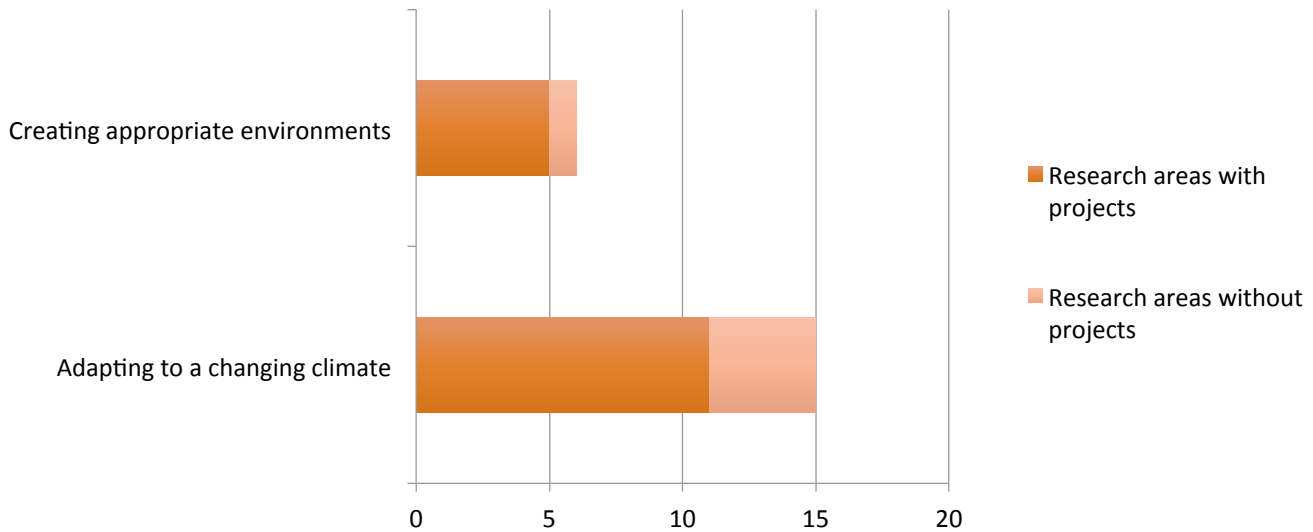
N/A

Theme 2: Understanding environments

Two topics

2A Creating appropriate environments

2B Adapting to climate change



2A Creating appropriate environments: 10 projects were identified which mapped against 5 research areas, leaving 1 research area unaddressed.

For this topic, research areas were not identified as being specific to the three subdomains, so further breakdown of the projects is not provided.

2B Adapting to a changing climate: 14 projects were identified which mapped against 11 research areas, leaving 4 research areas unaddressed.

For this topic, it appears that the greatest number of research projects have been carried out in the subdomain of the built historic environment (which is also the subdomain in which the greatest number of research areas was identified).



2 projects
on movable
items

Addressing 1/1 research areas



10 projects
on the built
historic
environment

Addressing 9/11 research areas



1 project
on
archaeology

Addressing 1/3 research areas

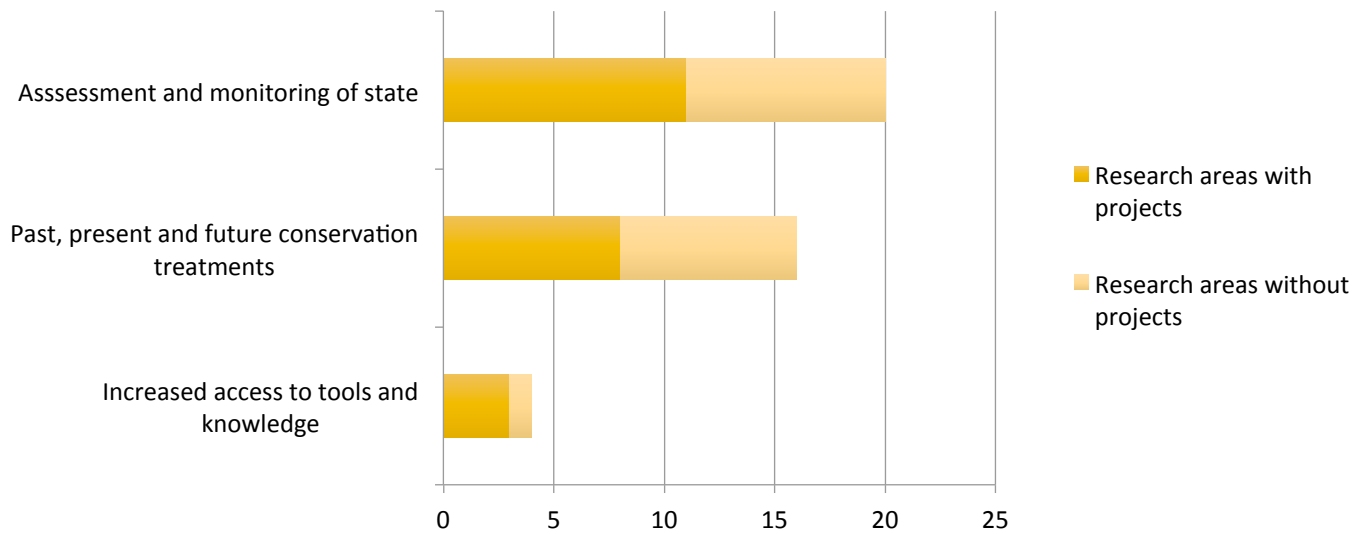
Theme 3: Improving practice

Three topics

3A Assessment and monitoring of state

3B Past, present and future conservation treatments

3C Increased access to tools and knowledge



3A Assessment and monitoring of state: 13 projects were identified which mapped against 11 research areas, leaving 9 research areas unaddressed.



7 projects

on developing existing or new portable methods

Addressing 6/9 research areas



6 projects

on developing new tools

Addressing 5/11 research areas

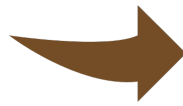
3B Past, present and future conservation treatments: 12 projects were identified which mapped against 8 research areas, leaving 8 research areas unaddressed.



1 project

revisiting current treatment procedures

Addressing 1/5 research areas



10 projects

investigating areas of future development

Addressing 6/8 research areas



1 project

investigating new materials for future techniques

Addressing 1/3 research areas

3C Increased access to tools and knowledge: 6 projects were identified which mapped against 3 research areas, leaving 1 research area unaddressed.