

Observatree: Citizen Science and new approaches for reporting pests and diseases

Ana Perez-Sierra, Suzanne Sancisi-Frey, Lucy Turner
Forest Research (UK)

Observatree/IPSN Conference on Tree and Plant Health Early Warning Systems in Europe
Tuesday 23rd – Wednesday 24th February 2016
The Royal Botanic Gardens Kew, UK

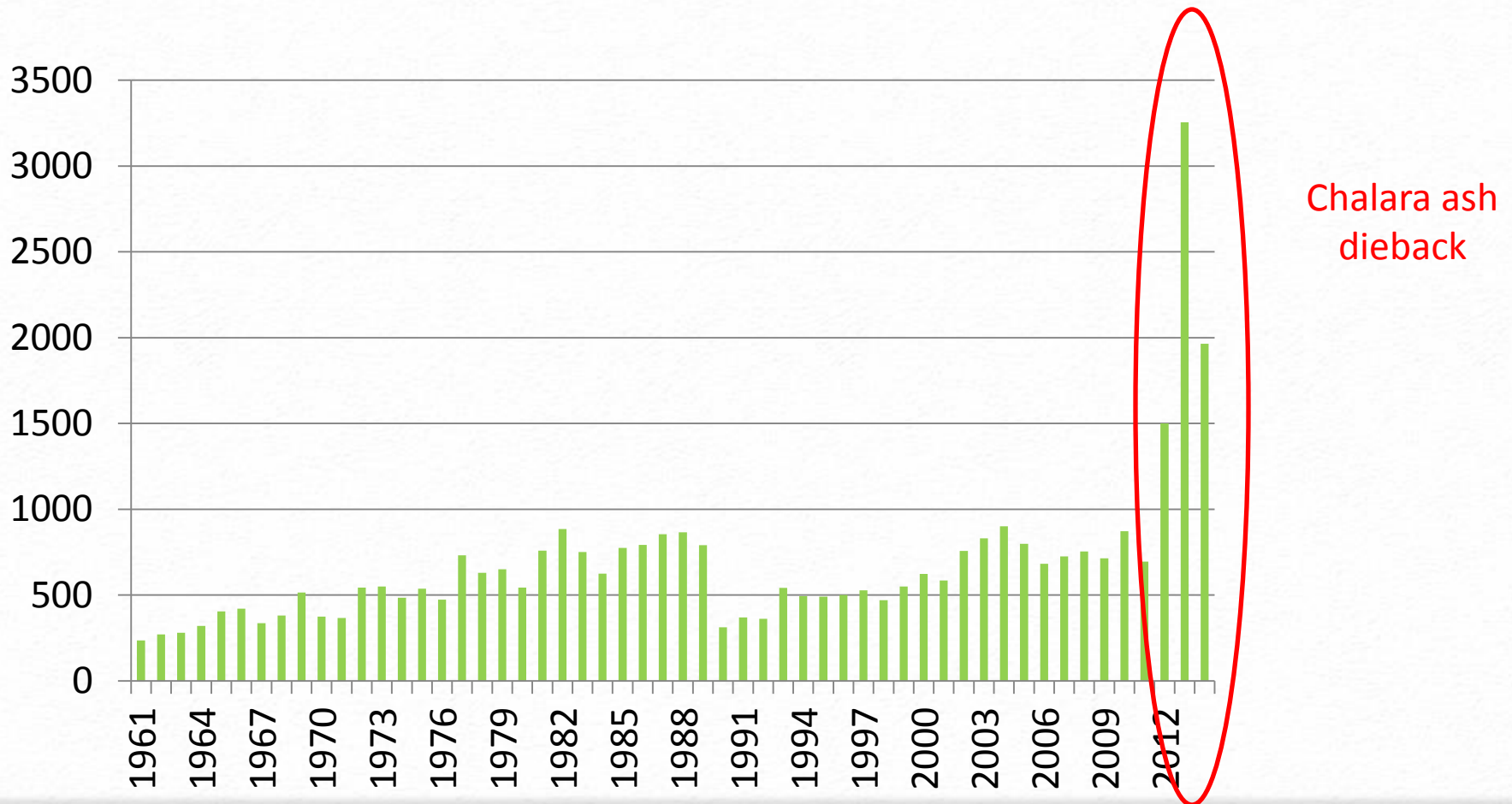
Our role in the project

- **Forest Research (FR)**: Primary research organisation for forests, woodlands and trees in the UK
- **FR** is the lead partner for Observatree
- **FR** provides expertise on tree pests and diseases for the volunteers through face to face training, webinars, videos, forum, blog,... and associated resources such as field guides
- **FR - Tree Health Diagnostic and Advisory Service (THDAS)** deals with pests and diseases enquiries
 - Two research stations:
 - Alice Holt (South England)
 - North Research Station (NRS) in Scotland

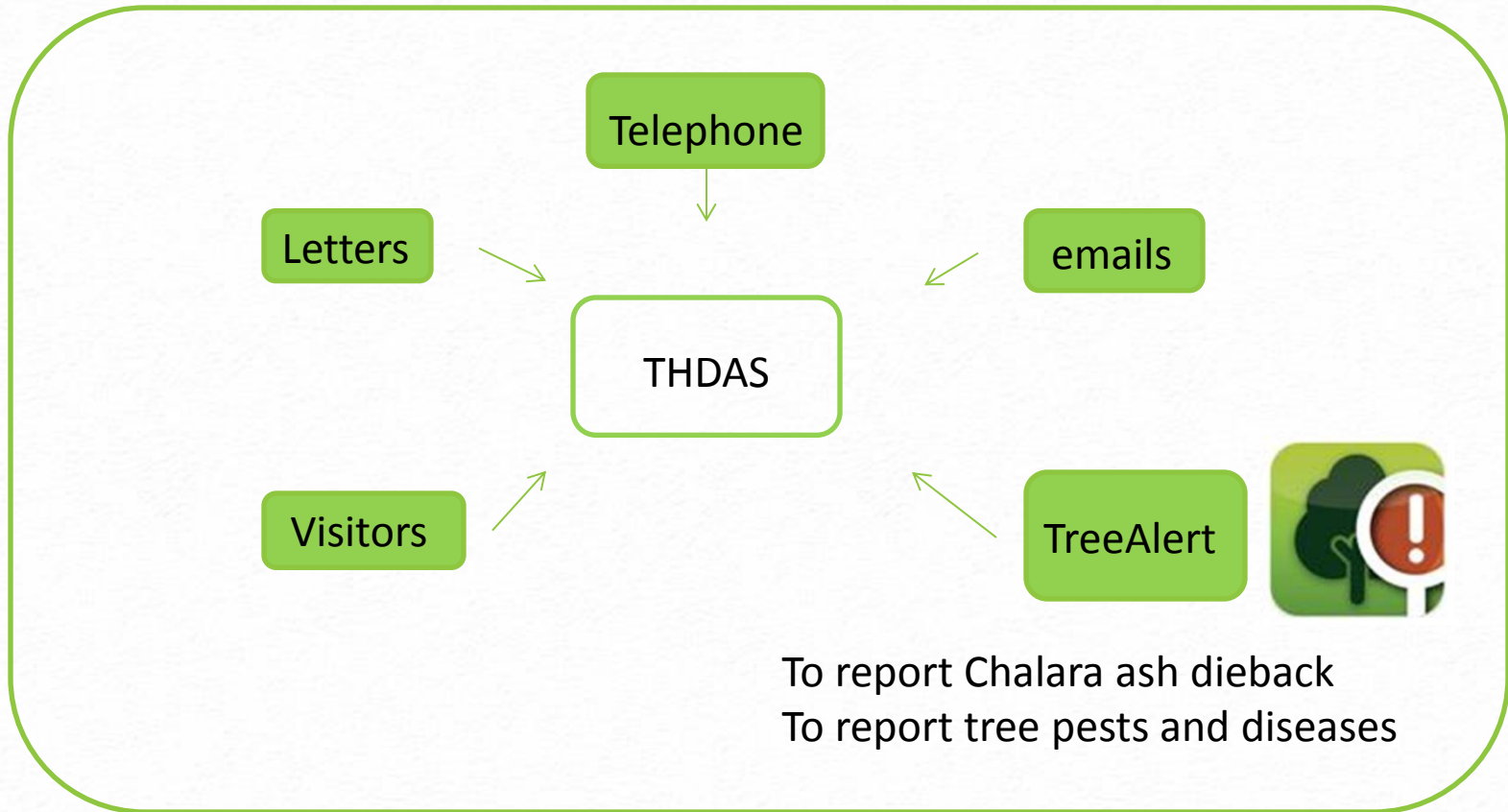
THDAS - Dealing with enquiries generated by the volunteers

THDAS

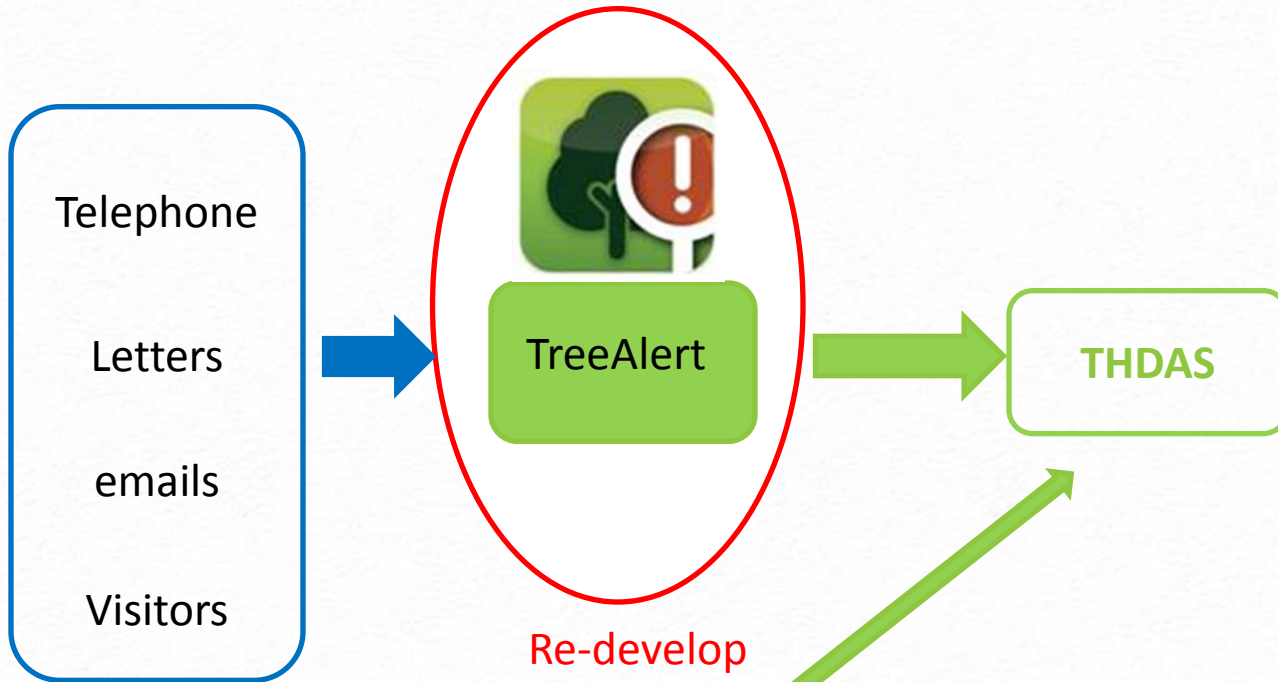
- Tree Health Diagnostic and Advisory Service (**THDAS**): Part of the Tree Health within FR since 1961



THDAS



THDAS



Re-develop

Email

Was kept during the re-development and still being used

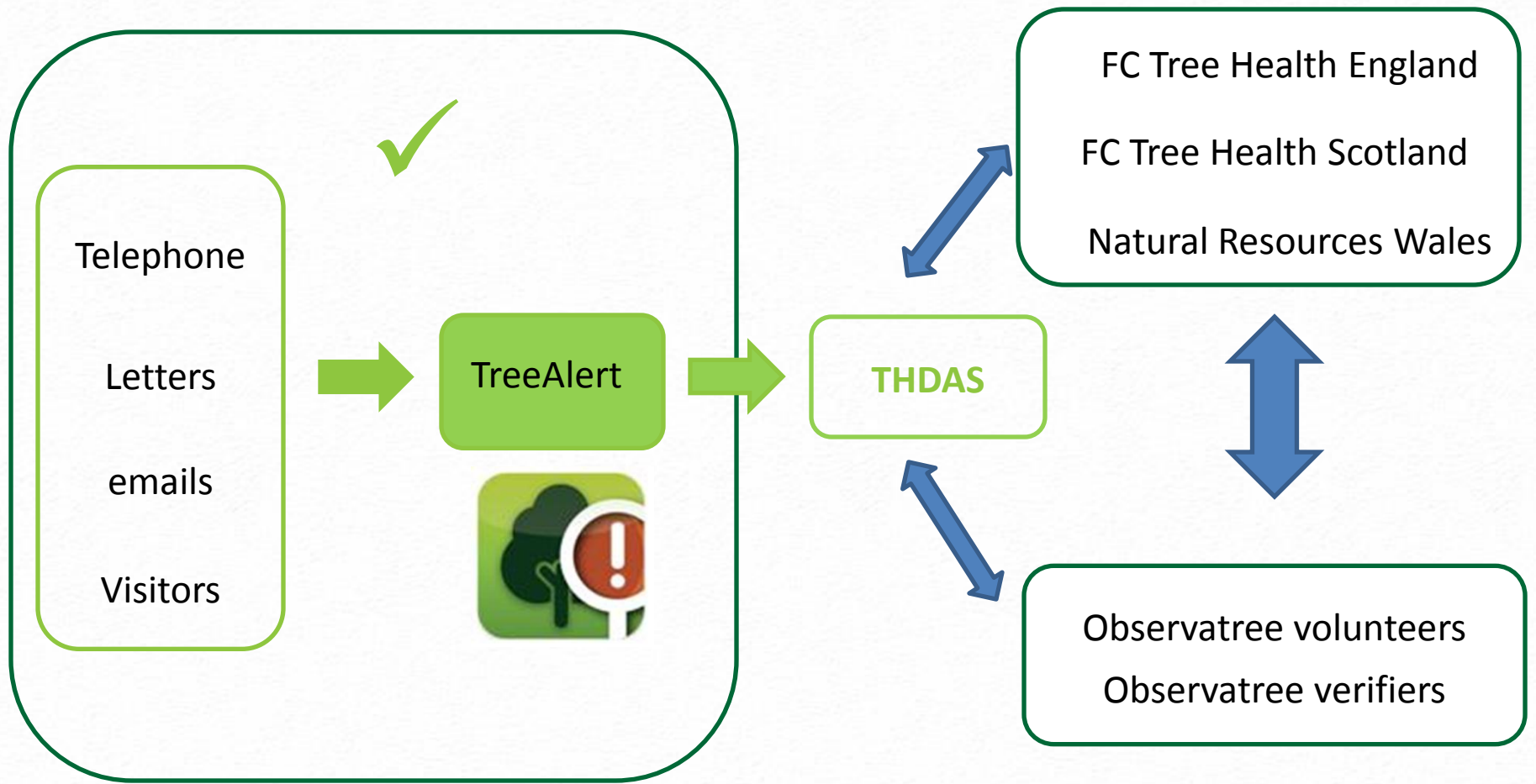
TreeAlert re-development

- From an App to a web-based system
- **Why?**
 - Quantity of reports was high but quality was low
 - Essential information was missing
 - Reports could not be followed up
 - Information submitted needed to be verified
 - Reporters were upset when contacted to request further information or samples
 - Reporters used it to report their neighbours' trees
 - Reporters used it to remove TPO trees

Example of low quality reports

- Chalara ash dieback (*Hymenoscyphus fraxineus*)

Year	Number of THDAS reports on ash	% of positives for Chalara	
2012	1054	2%	Before TreeAlert
2013	2046	< 1 %	TreeAlert App
2014	926	2%	TreeAlert App
2015	440	22%	TreeAlert Web-based



THDAS

A system to work with
Observatree verifiers

Observatree verifiers

A common approach
to work with the three
countries

FC Tree Health England
FC Tree Health Scotland
Natural resources Wales

A common approach
from the three
countries to work with
Observatree
volunteers

A system to work with
Observatree
volunteers

Observatree Surveyor
volunteers

Verification Portal



Tree A!ert

Tree Pest & Disease sighting reporter



Submission ID:
Date submitted:

Status:
Last state change:

[Return to list](#)

[Make Available To Volunteer](#)

[Edit Report](#)

[Save Edit](#)

[Cancel Edit](#)

[Assign Volunteer](#)

[Send to FR](#)

[Verification](#)

[Reporter](#)

[Landowner](#)

[Location](#)

[Host](#)

[Symptoms](#)

[Images](#)

[Journal](#)

Verification Portal

Submission ID:
Date submitted:

Status:
Last state change:

[Return to list](#)

[Unlock](#)

[Verified](#)

[Edit Report](#)

[Save Edit](#)

[Cancel Edit](#)

Verification

[Reporter](#)

[Landowner](#)

[Location](#)

[Host](#)

[Symptoms](#)

[Images](#)

[Journal](#)

Do you think it is one of the Observatree priority pests or disease?

No



What do you think it is?

Why do you think that?

What priority would you give this report?

High



How confident are you in your identification?

High



You are here: [Home](#) ▶ [verification](#)

THDAS



Verification Portal

A system to work with
Observatree verifiers

Observatree verifiers

A common approach
to work with the three
countries

FC Tree Health England
FC Tree Health Scotland
Natural resources Wales

A common approach
from the three
countries to work with
Observatree
volunteers

A system to work with
Observatree
volunteers

Observatree Surveyor
volunteers

All reports into **FR-THDAS**

Send to Tree Health teams

Needs to be followed up by
Observatree Volunteer

Visit

Reject

Send to
Observatree
volunteers

THDAS

Tree Health Support Officer liaise
with Woodland Trust to send
Observatree volunteers to follow
up enquiries

TreeAlert Support
Officer inputs outcome
of volunteer site visit
to THDAS

THDAS completes enquiry

THDAS



Verification Portal

A system to work with Observatree verifiers

Observatree verifiers

A common approach to work with the three countries

FC Tree Health England
FC Tree Health Scotland
Natural Resources Wales

A common approach from the three countries to work with Observatree volunteers

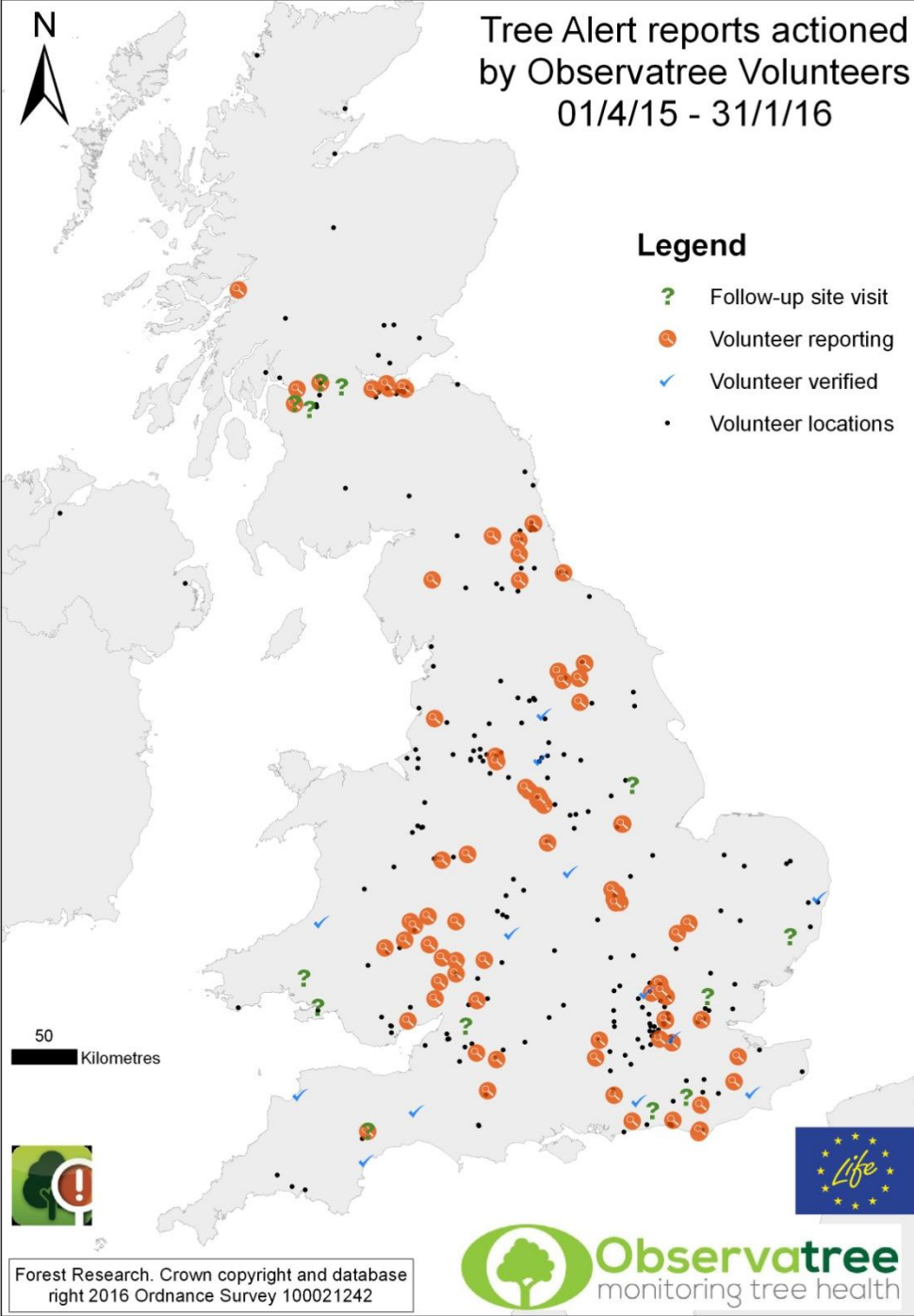
THDAS database

A system to work with Observatree volunteers

Observatree Surveyor volunteers



Tree Alert reports actioned by Observatree Volunteers 01/4/15 - 31/1/16



- The total number of enquiries from Observatree volunteers was 112 of which 95 were submitted via TreeAlert
- 2.4% of enquiries verified by Observatree Volunteers
- 1.6 % of enquiries followed up by Observatree volunteers

Thank you