Catchment level strategies to manage invasive species in Norfolk

Mike Sutton-Croft

Reducing the Impact of
Non-native Species in Europe
www.rinse-europe.eu

"Investing in your future"
Crossborder cooperation programme 2007-2013 Part-financed by the European Union (European Regional Development Fund)

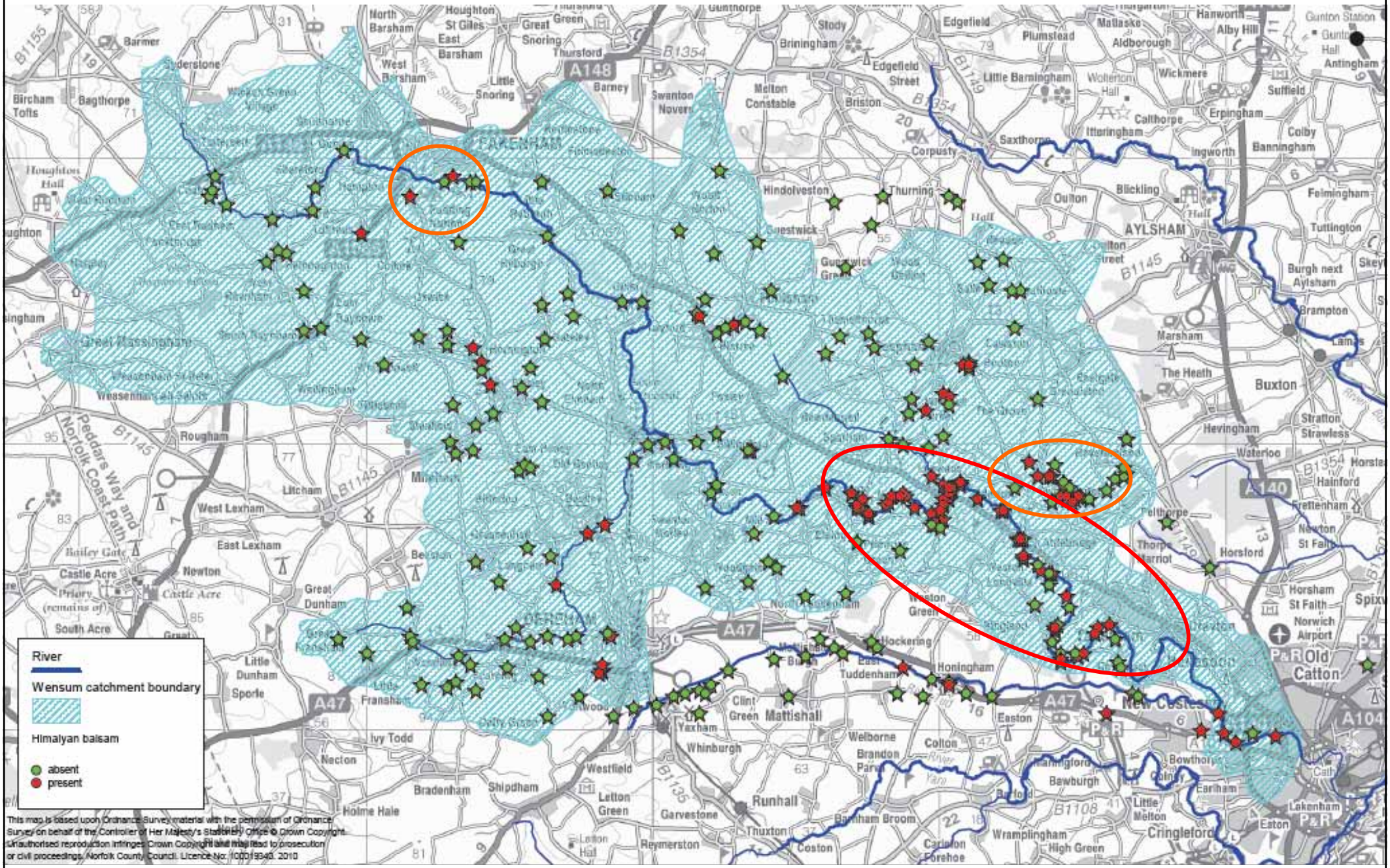
Himalayan Balsam

Dispersal: seed

Favours riparian habitats, commonly found along river banks

Explosive seed pods propel seeds from plants into nearby water

Rivers can act as dispersal highways, carrying seeds downstream allowing the plant to establish in new areas


River
Wensum catchment boundary
Himalyan balsam
absent
present
A47
A148
A140
A1067
B1145
B1354
B1149
B1135
B1108
AYLSHAM
Norwich Airport
Old Catton
Mattishall
Runhall
Peddars Way and Norfolk Coast Path
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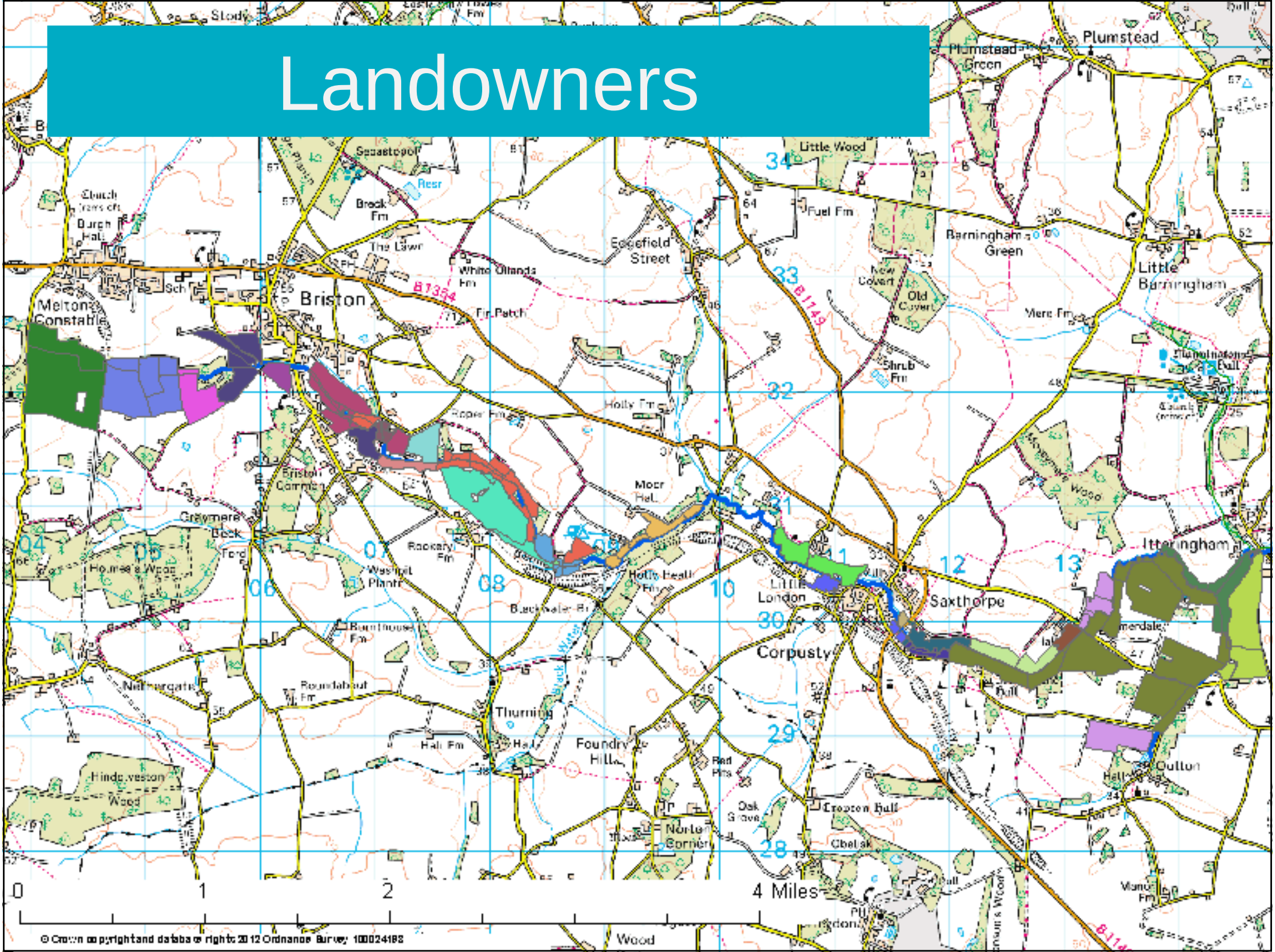
Action


Norfolk County Council
Norfolk Non-native Species Initiative
Invasive Species
ALERT!
Himalayan balsam is a tall annual plant frequently found on the banks of slow flowing rivers. Introduced to the UK in the 19th century as an ornamental plant, it has orchid-like pink flowers and quick growing properties. The plant has since become a widespread pest across the UK - spreading rapidly and outcompeting native species.

Removal July/August 2012 + 2013

- An incredible 39,000m^2 of Himalayan balsam was removed!
- Locations where removal has been carried out include:
  - Fakenham
  - Lyng
  - Lenwade
  - Old Costessey
  - Drayton
  - Taverham
- Removal was carried out by hand pulling and brush cutting.

Landowners


Plumstead
Plumstead Green
Little Wood
Fuel Plt
Barningham Green
Little Barningham
Edgefield Street
New Covert
Old Covert
Shrub Plt
Mere Plt
Melton Constable
Briston
B1354
B1149
Fir Patch
White Ollands Plt
Brick Plt
The Lawn
Sebastopol
Holly Plt
Moor Hall
Briston Corner
Greymere Beck
Holmes Wood
Rockery Plt
Westhill Plantn
Holly Beall Plt
Little London
Saxthorpe
Itteringham
Corpusty
Barnhouse Plt
Roundabout Plt
Thurning
Hall Plt
Foundry Hills
Red Pits
Oak Grove
Tropton Hall
Norton Corner
Outton
Hindolveston Wood
Wood
Wood
0
1
2
4 Miles
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Recruitment

A number of different methods were used to recruit volunteers for this survey

Volunteer websites such as Voluntary Norfolk

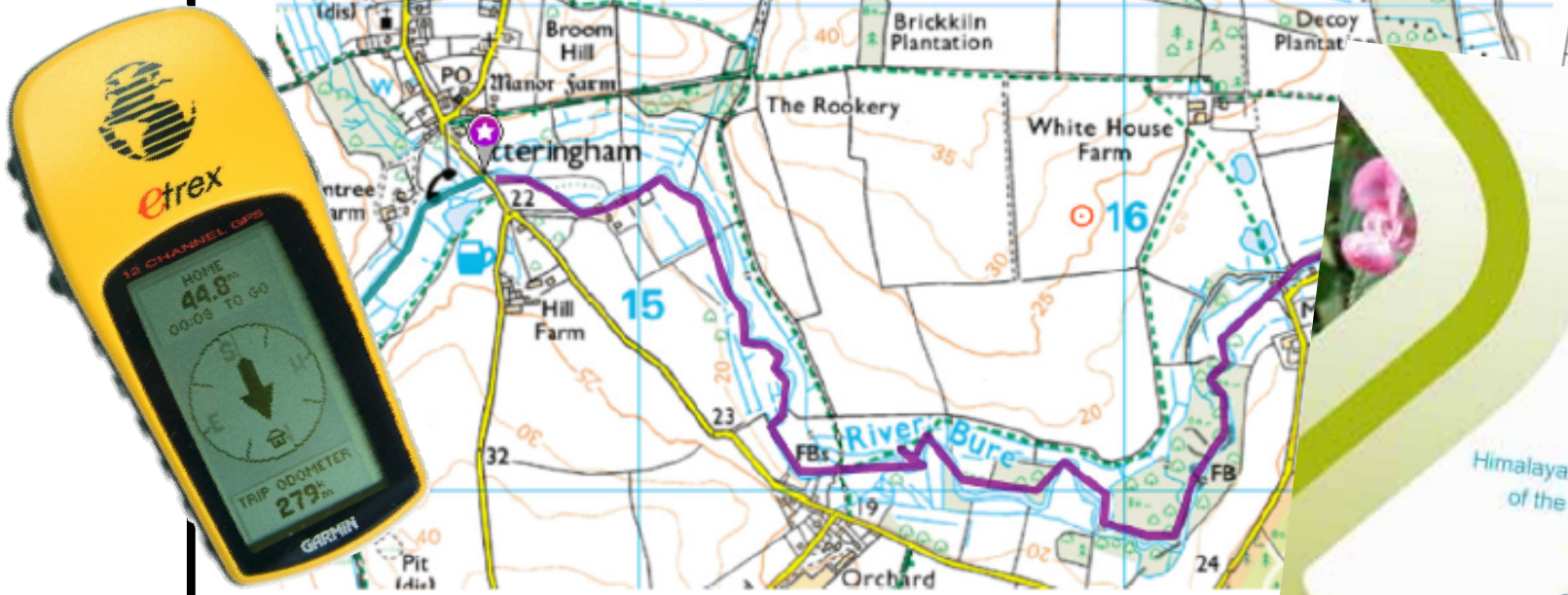
Local walking and wildlife groups such as Norfolk Ramblers

Training & Support

Section Code: RB6
Start Grid Ref: TG146306
End Grid Ref: TG170304
Section Description: Itterringham Bridge to TG1730
Parking: Itteringham
Distance: 7.5 km

"Investing in your future"

RINSE



Workshop

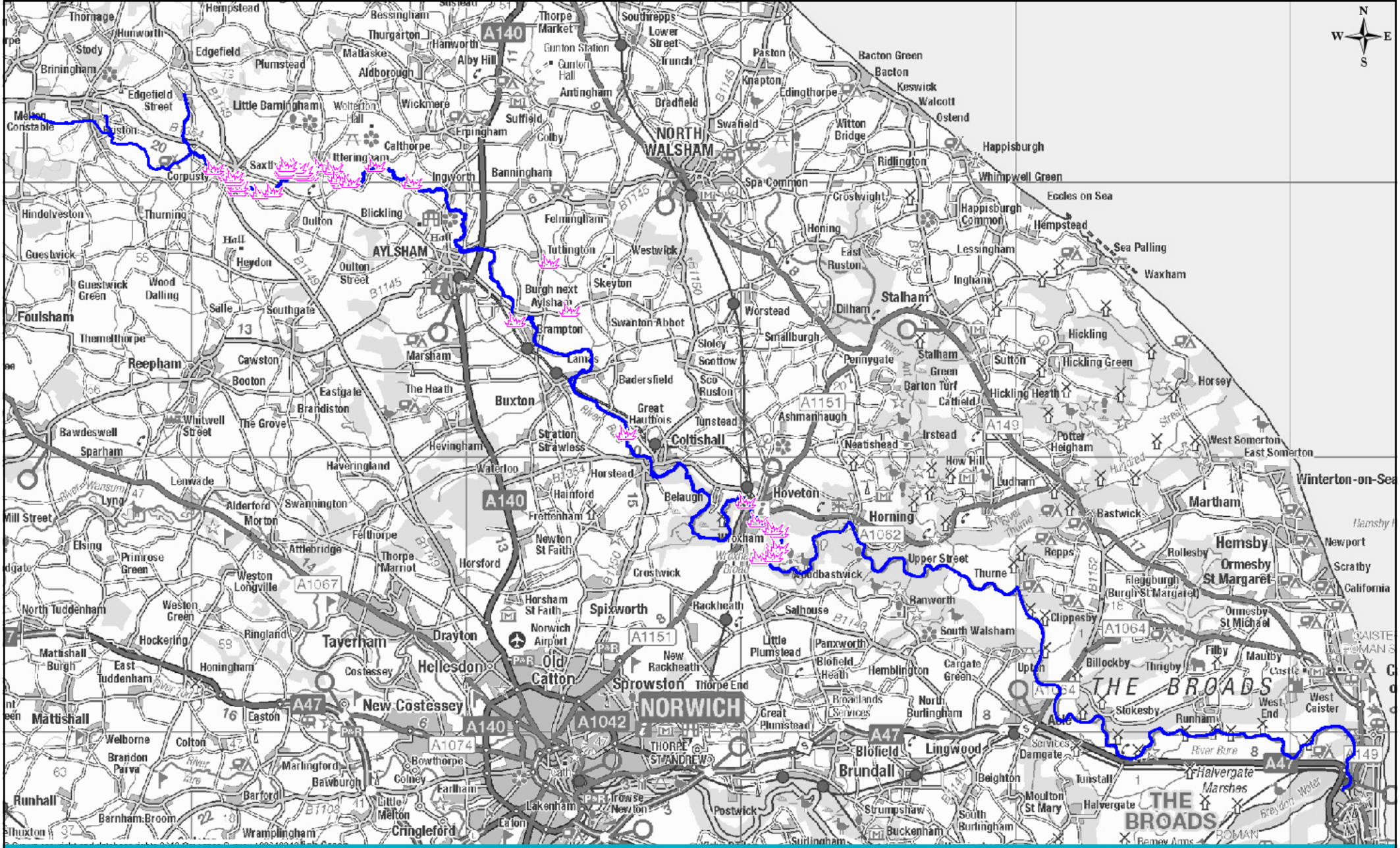
Workshop – Blickling Hall

Introduction to the RINSE Project

Survey methodology and aims

Identification of invasive plants, Himalayan balsam, Japanese knotweed and giant hogweed

Bob Ellis – native plants



Three hotspots of Himalayan balsam were identified along the River Bure: Corpusty, Itteringham and Wroxham Broads.

Feedback

RINSE

RINSE River Bure Survey 2013

"Investing in your future"

Bure Himalayan Balsam Survey

rom this survey has highlighted three significant
Himalayan Balsam: Corpusty, Itteringham and
Wroxham Broads.

1

ons

a river system, Himalayan Balsam's primary dispersal pathway is
refore it is vital to target infested areas in the upper catchment to
d (Dawson & Holland, 1999). The recommendations are as follows:

is study identify **Corpusty** to be the uppermost point of introduction.
gy of Himalayan Balsam and the potential dispersal of its seeds
ure eradication efforts should be focused at the source of the plant.

Broads, Himalayan Balsam was not found on either side of the River
therefore it can be assumed the plant has yet to disperse this far
erefore a priority for future work should be to halt the infestation at
is preventing future colonisation. However the possibility of
oductions in this area should not be ignored, increasing the need for an
ng network within the catchment.

local community at **Corpusty** suggests that the Himalayan Balsam
shed there within the last year. The implication of this would be a
bank making control efforts more effective in the short term.

ons of Himalayan Balsam, and the current knowledge of its dispersal
ught the **source** came from within **Corpusty**; likely spreading from a
ch lies adjacent to the Bure. Therefore it is recommended that future
n effort to engage the local community in Corpusty, raising awareness
lsam and its impacts on the local environment.

2

Feedback


Norfolk
Non-native
Species
Initiative
Help protect the biodiversity of Surlingham, Norwich. Join the
Big Balsam Bash!
What is Himalayan Balsam?
But fortunately, Balsam is easy to remove by hand and that's where you can really help make a difference.
Norfolk
Non-native
Species
Initiative
Join us for the big
BALSAM
BASH!
SATURDAY 20TH JULY 2013
Meet at Coldham Hall sailing club car park at 10am

Feedback

Invasive Species in the Broads

Tuesday 25th March, 6.30pm—8.30 pm

Erpingham Arms, NR11 7QA

The evening will begin with 3 brief presentations highlighting some the most common invasive species encountered in the farmed environment of the Broads, and how these can be managed to reduce their impacts. This will be followed by a light buffet and an opportunity to speak to invited experts about particular issues in more detail. There will also be a number of displays about invasive non-native species, including live examples of some of the worst species.

Guest speakers include:

David Hooton (Deer Initiative)

An update on the status of non-native deer in the Broads and options for their management

Simon Baker (formerly of the Coypu Research Laboratory)

Lessons learnt from the coypu eradication programme, and how these influence the new Norfolk Mink Control Strategy

Mike Sutton-Croft (Norfolk Non-native Species Initiative)

Invasive plants in the Broads

Booking is essential.

To book your place please call 01603 222765 or e-mail NNNSI@norfolk.gov.uk

Workshop in association with:

Broads Authority
The Broads - a member of the National Park family

Broadland Catchment Partnership

Norfolk Non-native Species Initiative

"Investing in your future"

RINSE

Japanese knotweed

Fallopia japonica

Species Profile:

Origin: Asia

UK Distribution: Widespread

Habitat: Damp environments, along watercourses

Pathway: Introduced as ornamental plant in 19th century

Reproduction: Solely v... from fragments of rhizor...

Legislation:

Wildlife and Countryside Act 1981
Schedule 9

Environmental Protection Act 1990

PHYSICAL

NOTE: DUE TO ITS VEGETATIVE REPRODUCTION STRATEGY, A CUTTING METHOD WHICH PRODUCES MINIMUM FRAGMENTATION IS RECOMMENDED.

TAKE CARE TO ENSURE EQUIPMENT

Japanese knotwe...

Eradication of this s...

There is no obligation... if this spec...

Cutting the plant will **reduce root growth** and **increase leaf production**. **Digging** the infested soil will bring the **root** system to the **surface** and stimulate the plant to grow a **high density** of **canes**. Both of these leave the plant more **vulnerable** to **herbicide** treatment.

The plant should be **cut cleanly** at the **base of the stem**.

The **cut canes** should be **left to dry** out **on-site** on a **hard surface.**

Once the **stems** hum **deep**...

This **cutting** and **digging** combination should take place **four times a year:**

1st cut and dig – when the **first shoots appear**

3rd cut and dig – ...**spaced** out between 1st and 4th

...nd dig – before the **...dies back** in the **autumn**

...hod will be required ...y for three years.

Japanese knotweed

Fallopia japonica

Shield-shaped leaves with a flat base

Zig-zag stem

Photo Credit: Snowdonia National Park Authority

Large thick roots

Photo Credit: ivm

Photo Credit: GBNNSS

Purple-speckled bamboo-like stems

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...www.rinse-europe.eu

...nal Development Fund)

Reducing the impact of Non-native Species in Europe
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