

Tree and Woodland Surveys for Bats for Development

Jan Collins, Head of Biodiversity
Bat Conservation Trust

Bat Conservation Trust



What's the problem?

- Some species exclusively tree roost
- Still a lot of unknowns
- Roost switching – bats often absent
- Evidence of bats quickly decays
- Longevity of tree features
- Visibility/accessibility of tree features



Photo by Daniel Hargreaves

What's the problem?



- Emergence/dawn surveys:
 - in darkness
 - under canopy
 - with fluttering leaves
 - exit points often obscured/high up
 - bats call quietly or not at all
 - bats emerge late



Photo by Hugh Clark

Bat Conservation Trust
**Bat Surveys for
Professional Ecologists**
Good Practice Guidelines



3rd edition

Bat Conservation Trust



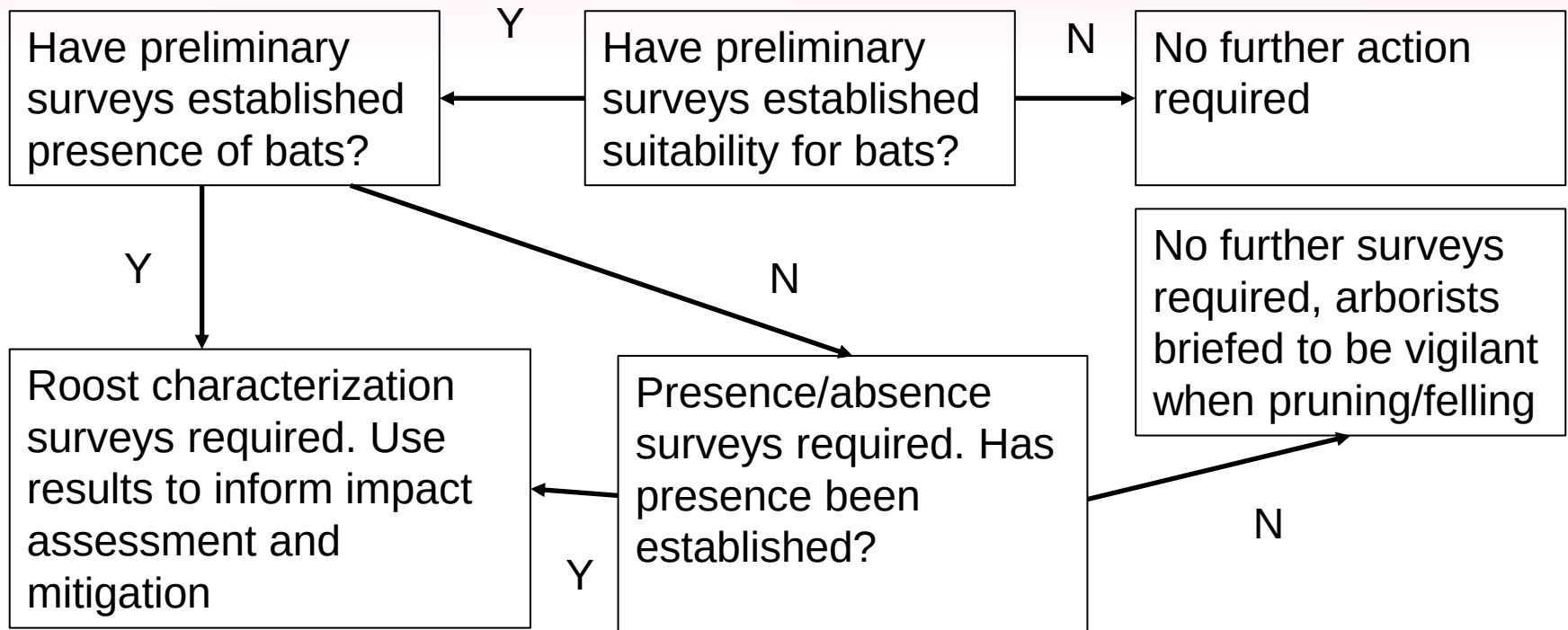
Preliminary Ecological Appraisal - Trees



Suitability	Description
Negligible	Negligible habitat features likely to be used by roosting bats
Low	A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential
Moderate	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status
High	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat



Tree Surveys – process flow chart



Tree Survey Types



- Preliminary Ground Level Roost Assessment
- Potential Roost Feature Inspection Survey
- Emergence/Re-entry Surveys (for presence/absence or roost characterization)



Caveats



Due to the limitations [of bat surveys of tree roosts] and from what is known about the ecology of tree-roosting bats, it is arguable that all trees with bat roosting potential should be considered part of a resource that will be used at one time or another by tree-roosting bats in order to determine the extent of impacts.

Survey work on individual trees may confirm presence but is unlikely to conclusively confirm absence.

Precautionary measures are likely to still be essential during works even where surveys have not identified occupancy.

Caveats



Where there are large numbers of trees, the efficiency and efficacy of PRF inspection and other techniques should be evaluated and alternative methods considered.

In situations where there are a lot of trees to survey, such as in woodland, it may be more effective to consider advanced licence bat survey techniques (ALBST) such as trapping and radio-tracking to locate tree roosts.

It's Not Perfect...

- Focus is on individual trees/bats
- Focus away from landscape/populations
- Expensive
- Inefficient
- Unlikely to detect roosts
- Don't have to use cameras
- Not appropriate for all stages of NSIP



Thanks for listening!



Photo by Daniel Hargreaves

Bat Conservation Trust

