

Appendices

Appendix 1. Blank questionnaire sent out to acquire consultants' views

PLEASE INDICATE (BY DELETING 'YES' OR 'NO AS APPLICABLE) WHICH OF THE FOLLOWING EAST OF ENGLAND LOCAL RECORD CENTRES YOU HAVE REQUESTED DATA FROM IN THE PAST:

- Bedfordshire & Luton Biodiversity Recording & Monitoring Centre Yes/No
- Cambridgeshire & Peterborough Biological Records Centre Yes/No
- Hertfordshire Biological Records Centre Yes/No
- Norfolk Biodiversity Information Service Yes/No
- Suffolk Biological Records Centre Yes/No
- any recording organisations in Essex (Essex does not currently have a fully functioning Records Centre) Yes/No

PLEASE ANSWER THE FOLLOWING QUESTIONS AS FULLY AS POSSIBLE:

SERVICES

1. What services/datasets do you need Local Record Centres to provide for you as standard?
2. Do you feel that you receive these from Local Record Centres at the moment?
3. Would you be willing to pay extra for more datasets (e.g. veteran trees, Tree Protection Orders, BAP habitat data....)?
4. Have you found that data coverage across the East of England region is patchy and are there any particular areas that need better coverage?

PRICING

5. What price do you think should be charged for a standard Local Record Centre data search?
6. Do you feel that, at the moment, Local Record Centres are providing good value for money?

SPEED OF SERVICE

7. How quickly do you need data to be provided in order to be useful to you?
8. Do you get this speed of service from Local Record Centres at the moment?
9. Would you be willing to pay extra for a faster service?

DATA FORMAT

10. In what format would it be most useful for you to have your data provided in (e.g. on paper or electronically, pdf maps, spreadsheets, reports, GIS layers....)?

DATA PROVISION

11. Do you ever provide data to Local Record Centres?
12. If yes, why do you provide this data?
13. If not, what are the obstacles preventing you from doing so, and is there anything Local Record Centres could do to help you to provide such data?

ONLINE DATA

14. Do you ever source data from the NBN gateway?
15. If an online data search facility were available on Local Record Centre websites (possibly 'pay-per-view') would you make use of them?

16. Would you consider paying a yearly fee in return for unlimited data searches, either regionally (across the East of England) or with a particular Local Record Centre?
17. Do you have any other comments or suggestions as to how the services of Local Record Centres could be improved or added to?

Appendix 2. IEEM Workshop Outputs

The Business Needs of Ecological Consultants for Environmental Data

Datasets that are:

- Recent
- Location specific
- Validated as accurate
- Includes all the protected taxa/species
- Represents all that has been collected in the area
- Supplied quickly
- At a cost that is proportionate to small developments
- In electronic form so they can be analysed efficiently and effectively.

Problems with Environmental Data Identified by Consultants

- The fragmented nature of data holders
- The situation in Essex is frustrating
- LRCs not having the 'full picture'
- LRCs not stating clearly enough what datasets they do and do not hold
- Not always clear if all records are validated
- Large datasets only being provided on paper
- Being charged for nil/miniscule data return
- Variation in charges
- LRCs that don't hold CWS/SNCI information

Suggestions for improvements:

- To have a universal standard service at a standard price
- To be able to supply a tailored service based on a quoted price
- To supply a premium service on request
- To be a one-stop-shop across data holders, not signposting
- To be a one-stop-shop for cross boundary searches
- Dispense with paper
- Data supplied in a user-specified format
- For the future – pay-as-you-view web service

Suggested Standard Service:

- Within a specific search area (500m – 5km)
- Statutory listed species (including invasives)
- Protected/rare/BAP species
- Local designations, citations and pdf maps
- Standard cost (not greater than £100)
- 5 working days for supply
- To list the high quality datasets available beyond the standard service

Options for premium service:

- Speed – fast turnaround of requests (24 hours)
- Depth – digital boundaries of sites & habitats
 - information on the quality of data
 - interpretation of potential data gaps
 - validated negative records
 - other recent data requests in that area
- News service – e.g. early warning of new datasets coming in

Appendix 3: Consultants' Conference 2010 Discussion Outputs

Standard services

- There was a consensus across the groups that there is a requirement for a radius search around a site for designated species and sites. The list of designated species should include all designations including Berne Annex 1. Particular reference was made to BAP (UK and LBAP), WCA, EPS, RDB, IUCN and locally rare plants. The need for information on non-native species was also raised. BAP habitat mapping was also seen as a potential dataset, although there was an awareness of the lack of coverage at present.
- Validated negative records are seen to be a very useful resource on the proviso that metadata on the survey methodology was available.
- A regionally consistent product was seen as being very useful.
- The need for a clear and honest metadata statement on the quality and currency of the dataset held by each LRC, including a gaps statement is needed, as is clear signposting to holders of information not available to the LRC but useful to consultants. This could include situations where data is passed to a national scheme and then to NBN rather than to the LRC.
- Search time was seen as needing to be within 5-10 working days.
- £100 + VAT charge was widely accepted as being appropriate, although this was actually considered too little by some consultants. However there was a suggestion that a small fee for a small search was maybe appropriate for very simple queries such as 'why is this site designated?' The issue of being charged for a search that returns no data was also raised as an issue, the suggestion being that no charge is made in this case. Alongside this it was suggested that searches on county boundaries that need to be run by more than one LRC could be processed by contacting just one LRC. (This has been acted on and now where this happens the data will be returned by one of the LRCs with only a single data search charge being made rather than the 2 which would have been levied previously).
- A sliding scale of charges for smaller searches or only one species group compared with a full data search was also suggested. This may not be possible because the time taken to do the search may still be the same, but will be examined.
- The possibility of SLA type agreements for consultancies who make a large number of enquiries annually was raised. This has been considered by the LRCs and will be examined fully as part of the project.
- The development of online data searches was suggested on a pay per view basis. If this was pursued there would be the possibility of linking with data held on the NBN gateway but not within the LRC datasets. (This subject was also raised at an NBN and consultants' conference attended by Martin Horlock of NBIS, and the development of web services to do this is underway). This will be investigated as part of the project. Parallel to this the project officer will be looking at possible online screening of planning applications for local authorities, and any products developed for this will also be able to help with data searches for consultants.
- A standard timescale for enquiries was seen as desirable. If not possible then the client should be told when they can expect to receive the data. This could be covered by a standard response sent out to acknowledge receipt of the enquiry rather than silence until the results arrive.

Premium Service

- Discussion around what should be considered a premium service largely concentrated on a faster response time and added value data.

- Most felt that if there was a very quick turn around such as 24-48 hours for an enquiry then a higher charge could be appropriate. However, at some LRCs this would be the standard response time in most case anyway and the majority of responses revolved around better quality information rather than speed.
- The content of the premium service can only be determined in reality once the standard service is outlined, but it was felt that the major themes should be concentrating on the LRC being a 'one stop shop', giving context to the records and adding further datasets such as habitat, opportunity mapping and ecological networks.
- The 'one stop shop' approach could include the service of undertaking the collection of data not held by the LRC on behalf of the consultant for instance from the NBN gateway. (It should be recognised that data not held by the LRC may not be available to them for any number of reasons and this may not be possible in some cases).
- The context of the record could include information such as the county or national status of that species, or a brief description.
- Extra datasets such as veteran trees, Tree Protection Orders and GIS datasets for BAP habitats were considered to be very valuable. Where available, opportunity or ecological network mapping would also be a useful product.
- The inclusion of maps of where previous data searches (and therefore surveys) have been undertaken, and by whom, could help consultants to gather information. However, there may be an issue with data protection here and this would need to be given careful consideration.
- A headline news service outlining new datasets added and improvements to services etc via email was suggested.

Data exchange

- Consultants gather a large volume of environmental data, a lot of which does not flow back to the LRC network. Discussions revolved around the issues that stop data transfer, and what could help improve the flow.
- Client confidentiality, intellectual copyright and the time taken to process the data into a form suitable for the LRC were raised as the major issues preventing data being transferred to the LRCs.
- Another major issue was the perception that a consultant could be buying back their own records.
- It was suggested that a standard data spreadsheet or form be developed for the region which consultants can use to provide data. This would include information on the minimum standard of grid reference etc. This should be sent out with all enquiry responses.
- Alongside this it was suggested that there could be a standardised form in which local authorities accept biological information for planning applications or ecological reports. This would also include a note that all records will be passed to LRCs.
- It was suggested that a discount on data searches could be given if data was provided by consultants.
- It was felt that if the information needed was prioritised that consultants could send more data through. For instance just sending BAP rather than all data collected.
- Ecological reports for development control are available to all online when they have been submitted so it was felt that LRCs could investigate extracting the data this way. It was however raised that this is a time consuming way of collecting the data and does not always provide all the information needed to make high quality records.

Other topics

- It was felt that the conference had been a worthwhile event and should be repeated as long as there was a relevant theme. It was suggested that this could be combined with the regional IEEM conference, and could possibly be expanded to include attendees from local recording groups and local authorities. The possibility of running the event outside of working hours was raised as there is a financial implication to attending.
- The time given to consultants to undertake their work is becoming much shorter with an obvious impact on the requirements of LRCs. It was thought that IEEM and ALERC could be pressured to develop best practice on environmental studies to be built in to the planning process at an earlier stage.

Appendix 4. Summary of Responses from Questionnaires

- Need records of protected species with a good amount of detail.
- Need information on protected sites (statutory and non-statutory) – boundaries and reasons for designation.
- Generally prepared to pay a little bit more for extra datasets on occasions, but not a lot.
- Pricing suggested between £50-250 for a standard search (one suggestion of up to £500 for a larger search!) Generally £70-100.
- Consensus that LRCs are currently good value for money.
- Need data in 1-2 weeks.
- Response time at the moment is variable, though generally good.
- Mixed opinions about paying more for a faster service.
- Everyone wants their data electronically.
- Format needed varies widely – PDF, spreadsheets, GIS layers... Sometimes depends on the project so choice would be good.
- Mixed views on the potential for an SLA-type agreement. This probably depends on the size of the consultancy and how frequently they work in this region.
- All say they provide data to LRCs, either because they feel it is worthwhile ethically, or because IEEM tells them to!
- The reasons for not sending their data in were the wishes of clients and the fact that it's very time consuming.
- Some do use the NBN Gateway (small sites or during the scoping stage)
- Mainly positive response to online data search facility but at a lower price and with adequate LRC support.
- Standard data request form could be useful.
- Could offer greater choice and flexibility in data format and return date?
- Could supply a list of local surveyors who could go out and survey difficult species?
- Could highlight/colour code important/BAP species so they stand out in long lists.

Problems:

- Having to source datasets from other organisations.
- Lack of detail/completeness of records.
- Variability in charging and response time between LRCs

Appendix 5. Provisional Data Enquiry Form

Please fill in all applicable information. # indicates mandatory information.

Information Requested by:

#Name:	Organisation (if applicable):
#Address:	
Invoice Address (if different):	
Telephone:	Fax:
#Email:	
#Preferred contact method?	

#Reason for Request:

#Is this a commercial enquiry (yes/no)*?

(* A commercial enquiry includes any request made for commercial purposes such as for planning, development or FEP applications)

Search Area:

#Site/Place Name:	
<input type="checkbox"/> Circle (Central point, plus radius) <input type="checkbox"/> List of grid squares <input type="checkbox"/> Linear (Line, plus corridor width)** <input type="checkbox"/> User-defined shape** ** please attach a map or GIS file (ArcGIS or MapInfo) showing the site boundary	Central grid reference or list of grid squares:
	Radius or corridor width:
Any other information:	

*** 'Basic Data Search' includes the following (where data are available):

SPECIES - Wildlife & Countryside Act 1981 Schedules 1,5 &8; The Conservation of Habitats & Species Regulations 2010 Schedules 2&5; Protection of Badgers Act 1992; Bonn Convention Appendix 1&2; Bern Convention Annex 1&2; Birds Directive Annex 1; Habitats Directive Annex 2,4&5; NERC Act 2006 Section 41 species; UKBAP species (both local and national); Veteran trees.

SITES – *Map showing:* Ramsar; Special Areas of Conservation (incl. cSACs); Special Protection Areas (incl. pSPAs); Sites of Special Scientific Interest; National Nature Reserves; Local Nature Reserves; County Wildlife Sites; Roadside Nature Reserves; RIGS; Ancient Woodland.

#Species Data Required (please tick those required):

Basic Data Search***

Additional Information:

- IUCN Red List species
- Wildlife & Countryside Act 1981 Schedule 9
- Red & Amber List Bird Species
- Nationally Notable Species
- Locally Rare Species

All Species

If your request is not covered by the above, please detail the information you require here:

As a minimum we will provide the most up to date species records available covering at least the last ten years (subject to availability). Please see our [metadata statement](#) for more information on the temporal coverage of our species records.

#Site Data Required (please tick those required):

Basic Data Search***

Additional Information:

- Geodiversity Sites (where applicable)
- (BAP habitats)

Do you require site citations (tick if yes)?

If your request is not covered by the above, please detail the information you require here:

Data Format:

#Please specify preferred report format:

- Species data: Not Required
- Map of Protected Sites in Search Area****: Not Required

**** GIS layers based on MasterMap data (such as protected site boundaries) can only be provided to customers who have a valid OS licence. If requesting this data, please provide your OS licence number here:

By signing this form, you accept that you have read and agree to our terms and conditions:

#Signed:

Date:

Please email your completed form to: ...

Appendix 6. Regional Template for Requesting Data Back from Consultants

Microsoft Excel - Final Regional Template.xls

Type a question for help

File Edit View Insert Format Tools Data Window Help

80%

Arial 12 B I U

K15

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Please enter your records below. The information in BOLD should be provided as a minimum .												
2													
3	SPECIES GROUP	SPECIES		DATE SEEN	LOCATION	LOCATION DETAILS	GRID REFERENCE	ABUNDANCE	RECORD TYPE	COMMENTS	RECORDER NAME	RECORDER CONTACT DETAILS	
4		SCIENTIFIC NAME	COMMON NAME										
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													

Records / Guidance Notes /

Appendix 7: 'LRCs and Environmental Consultants' Leaflet.

Local Records Centres in the East of England

Bedfordshire & Luton Biodiversity Recording & Monitoring Centre
 c/o The Wildlife Trust, Priory Country Park Visitor Centre, Barkers Lane, Bedford MK41 9DJ
 01234 355435 www.bedsbionet.org.uk
 brmc@bedsbionet.org.uk

Cambridgeshire & Peterborough Environmental Records Centre
 The Manor House, Broad Street, Great Cambourne CB23 6DH
 01954 713570 www.cperc.org.uk
 data@cperc.org.uk

Biological Records in Essex
 c/o Essex Wildlife Trust, Abbots Hall Farm, Great Wigborough, Colchester, Essex CO5 7RZ
 01621 862999 www.brienet.org.uk
 records@essexwt.org.uk

Hertfordshire Biological Records Centre
 HBRC, Environment, County Hall, Hertford SG13 8DN 01992 555220
 http://enquire.hertscc.gov.uk/hbrc
 biorec.info@hertscc.gov.uk

Norfolk Biodiversity Information Service
 County Hall, Norwich NR1 2SG
 01603 224453 www.nbis.org.uk
 enquiries.nbis@norfolk.gov.uk

Suffolk Biological Records Centre
 Ipswich Museum, High Street, Ipswich IP31 3QH 01473 433547
 www.users.globalnet.co.uk/~sbrcc/
 martin.sanford@suffolk.gov.uk

Front page pictures: main image: oak at Earham Park (David Boulton);
 Inset (left to right): great-crested newt (Karl Charters); brown hare (Peter Vousden);
 barn owl (Peter Mallett); pipistrelle bat (Elizabeth Dack); white-clawed crayfish (Essex Wildlife Trust).



Biological data for Environmental Consultants:

Introducing new standards of service from Local Records Centres in the East of England

Introducing your Local Records Centres

There are six* Local Records Centres in the East of England, which are the focus for biological information in the region. Although they are hosted and run in slightly different ways, they have one common goal: the collection, management and interpretation of wildlife data so that it can be used for the conservation and enhancement of local biodiversity.

The centres all operate on a not-for-profit basis, providing information for a range of people and organisations. They work closely with County Recorders (who organise the gathering and validation of biological information) to address priorities for future recording such as closing the gap between available data and data needs.

Wherever possible, they are working to integrate their data with the National Biodiversity Network (NBN), which collates information for the whole of the UK.

Environmental consultants benefit from information and services offered by the region's Local Records Centres, for example:

- The provision of data on statutory and non-statutory site boundaries
- Protected and notable species records and other species data for a defined search area
- Habitat and geodiversity information

With other specialist tasks such as habitat opportunity mapping also offered, Local Records Centres represent a cost-effective resource for consultants. Results can be used directly within reports compiled for clients, and can inform further surveys needed.

Standard enquiry service for Environmental consultants

From the 31st March 2011, all six records centres* in the region will provide an improved standardised data enquiry service in response to comments suggested by environmental consultants.

Standard enquiries for data within a defined search area will:

- **Include records of species of conservation concern** (including species protected by the Wildlife and Countryside Act, 1981; Protection of Badgers Act; Habitat Regulations 2010; Bird and Habitats Directives; Bonn and Bern Conventions; NERC Section 41; UKBAP (local and national); Veteran Trees (where available); IUCN red data book species; nationally notable and locally rare species; red and amber list bird species; non-native invasive species);
- **Include a map of statutory and non-statutory site boundaries** (such as Ramsar; SAC; SPA; SSSI; NNR; LNR; County Wildlife Sites**; Roadside Nature Reserves**; RIGS** and Ancient Woodland). Citations to be provided on request;
- **Not incur a charge if no records are found;**
- **Be completed within 10 working days (usually sooner);**
- **Include the most recent data held by the LRC.** A metadata statement will be available on each LRC's website, detailing the temporal and geographical coverage of data holdings, data quality and data security;
- **Be sent out in user-specified format** (Excel/Word tables, GIS files, pdf or jpg) subject to licensing restrictions;
- **Provide records from the adjacent county** if the search area spans a county border, without incurring further charges.***

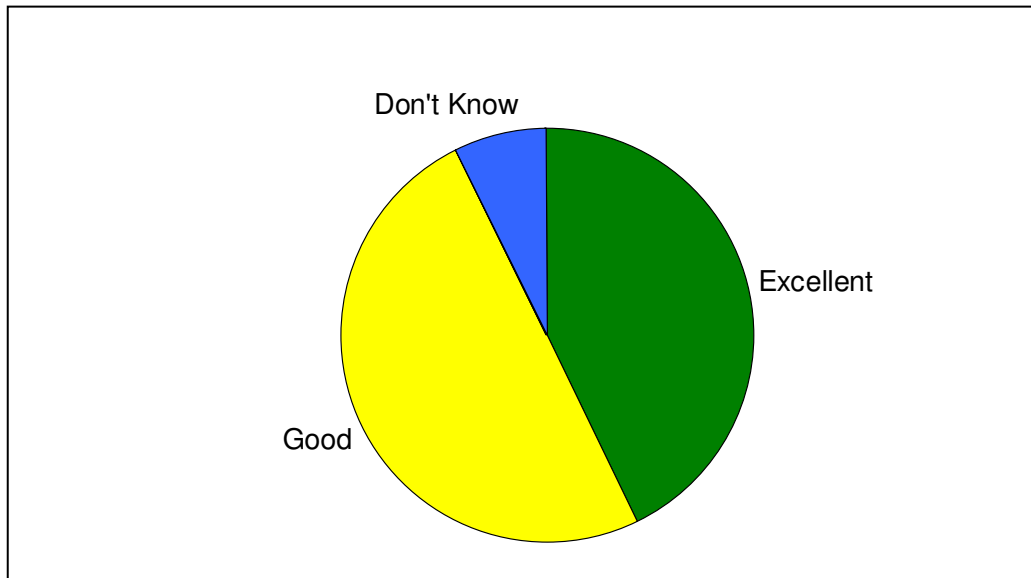
If your information needs are not covered by this standard enquiry service, please do ask and we will do our best to help.

* BRIE is not yet a fully-functioning records' centre and is currently working on a pilot project.
 ** Names may vary between counties. ***Applies to the East of England region only.



Appendix 8: Feedback from the Consultants' Conference 2011

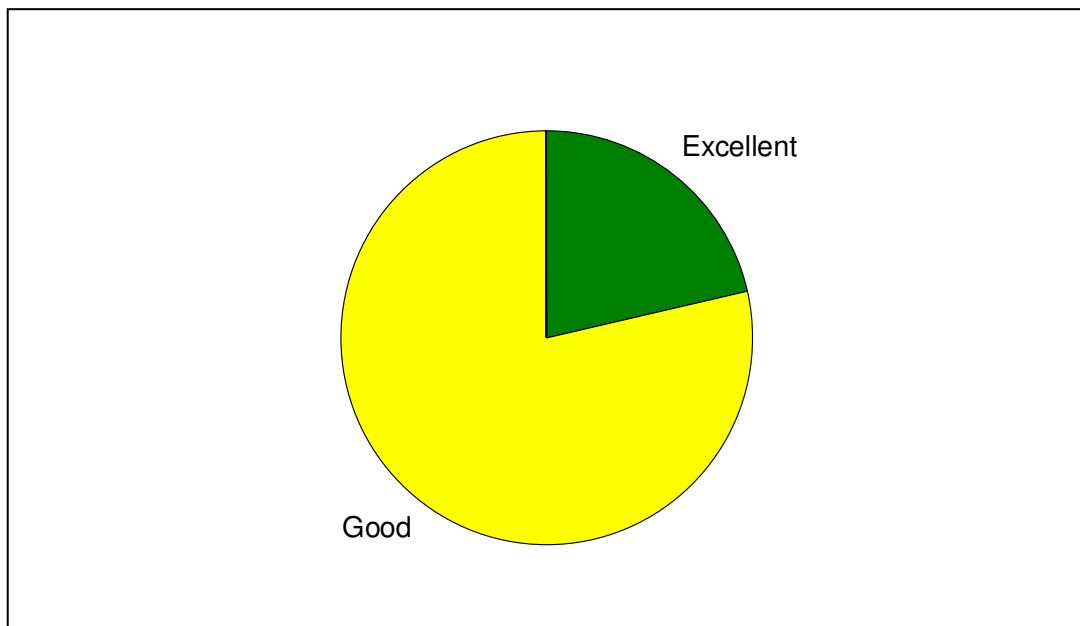
Presentations:



Comments:

- Comments all IEEM very interesting, also BRIE update. But all good & interesting.
- Good speakers.
- Great to have a range of backgrounds.
- Good range of speakers and topics.
- Very good.
- Extremely interesting. Good variety. Food for thought!

Workshops:

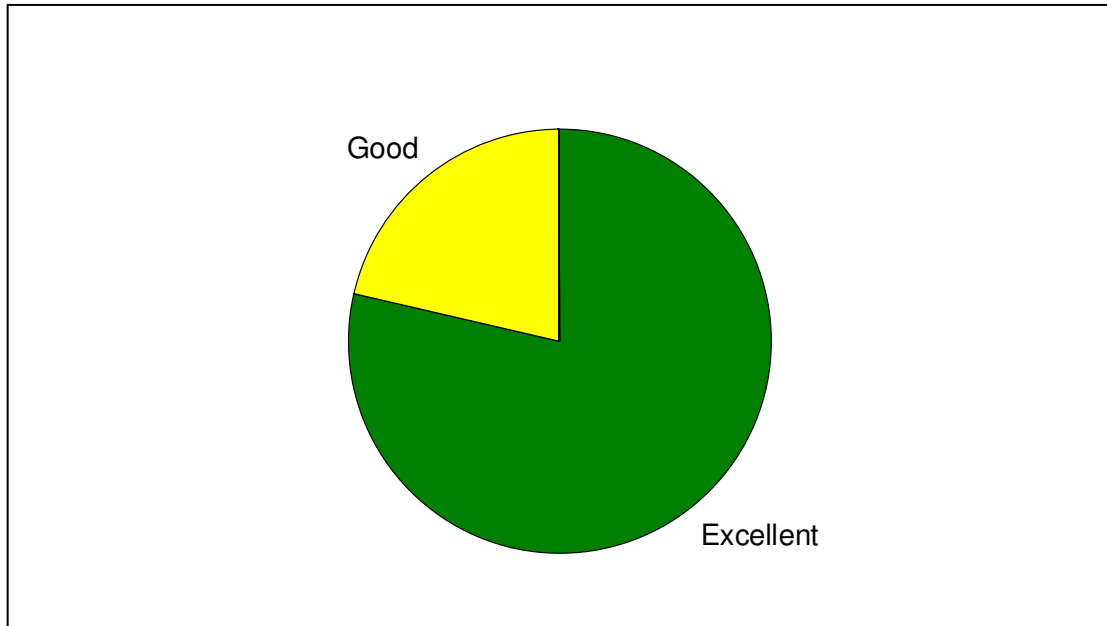


Comments:

- Maybe a bit too much time & would be good to report back to everyone at the end.
- Useful process.

- Interesting to discuss topics, not only with LRCs but also with other consultants.
- Useful content for discussion.
- Very useful forum for discussion.
- Very useful to discuss and see things from LRCs point of view rather than just from consultants side.
- Very good.
- Good level of discussion with wide range of participants. Good number of discussion points.

Event Organisation:



Was the event useful?

100% of respondents felt the event was useful.

Comments:

- I look forward to hearing the overall feedback from the discussion groups.
- Good to see & meet records centre people. Useful dialogue on how to improve relationships with consultants. Good ideas & a constructive day.
- Educational for ways of using LRCs.
- It is lovely to meet people who we email throughout the year (over the last few years). There are lots of hurdles to overcome...just need time!.
- Good to discuss opportunities to improve inefficiencies.
- Very informative.
- Good to get update on progress with local LRCs and their development.
- Thank you.
- Very interesting. I didn't attend 1st conference but everything raised was relevant to the business.
- Extremely useful. Would definitely attend future events of a similar nature.
- Useful to meet consultancies & gauge comments/ reaction to data provision.

Would you like us to arrange a similar event again?

100% of respondents would like us to arrange a similar event again. Eight of these respondents would be willing to pay a small amount towards attending such an event, five were unsure and one said they would not be willing to pay.

Comments:

- Get more consultants to attend.
- It would be good to meet again in a year to see how things have progressed.
- It could be advertised more widely.
- Definitely.
- Yes please!
- Regular meetings between LRCs and consultants very important.

Other Comments

- Good to exchange ideas, issues, problems & best practice.
- Mailing list for email updates/news from LRCs in the region.
- Good idea to have talks then workshop. I'm still a little confused on the relationship between NBN and LRCs – could there be an NBN speaker? Very interesting and useful to meet people behind the emails and understand more of what they do.
- Well done to all concerned! Good event. Many thanks.

Appendix 9. Consultants' Conference 2011 Discussion Outputs

DATA EXCHANGE

Barriers

- The key barrier regarding sharing data with LRCs seems to be the time taken to collate these records to send. Data sharing is not generally a high priority, and this time is often not costed for in projects. This is a particular problem for smaller consultancies.
- Data confidentiality can be a problem until the development has actually happened. Landowners may choose to suppress data even if they are asked if it can be shared.
- Data is collected by consultants in many different ways, including Word documents, spreadsheets and plots. Could LRCs help by processing the records into the right format? It can be difficult to get hold of all of the raw data, with recorder name and exact survey dates often missing.
- Finally, some data is not perceived as being important enough to share – the common species routinely recorded at virtually every site.

Solutions?

- A clause could be written into the consultants' contract stating that data will be provided to the LRC unless the client 'opts out'. IEEM could play a role in the development of this.
- LRCs will accept any data format – this is preferable to receiving no records. A standard template spreadsheet should be available from LRCs. Some LRCs already have such a template on their website, but consultants are not always aware of them. Again, perhaps IEEM could help with this, in developing a nationally standard spreadsheet. There could possibly be an online version as well?
- Other possible data exchange methods could include smart phone apps and GPS handheld devices which can be used in the field – this is clunky at the moment but the technology is being developed.

Incentivising

- The idea of incentives for consultants who provide their data to LRCs came up in all of the discussion groups.
- Discounted data searches for data providers were suggested, though making these consistent could prove difficult. Exclusive events and/or training courses for consultants who provided data were also suggested. Data providers could be allowed to request specific surveys for LRCs to undertake in order to fill in key gaps.
- There is the potential for good PR for data providers. LRC websites could have a 'page of supporters', perhaps with links to the consultancy's website to show that they have contributed data.

Other

- Online recording, while not available yet, could offer the potential of online uploading as well, provided that validation issues are overcome.
- Anglian Water are currently setting up their own Access database to hold their records. They pay consultants to collect data, but they own the data and they are happy to share it with LRCs but don't know how.

ONLINE DATA PROVISION

Advantages

- There seemed to be a consensus that if online data provision was offered it should be an extra service rather than a replacement of the current data enquiry service, as this is a quick and easy service anyway.
- An online search may be useful for an initial check to assess the volume of data available. Alternatively it could be a useful follow-up to a data search and provide online distribution maps for the search area.
- Advantages of online data provision are the extra-quick turnaround time and offering the consultant more control over what they get.
- Online data submission and retrieval are being encouraged by Natural England as a progressive business model for the future.

Disadvantages

- Potential technical problems were seen as a downside to online data provision, particularly if it's the only option. It needs to be very easy and user-friendly.
- The development of such a service would take a lot of time and effort and it was felt by some that the potential benefits may not justify this.
- Some of the consultants prefer the current system of data enquiries because: they don't have time to do the search themselves; they prefer talking to the LRCs; LRCs may add value to the records with local involvement and interpretation.
- There has been a very mixed response from the consultants using the NBN Gateway, so why should an LRC online service work better? However LRC data will be verified, whereas this is not necessarily the case with the data on the NBN.

NBN

- The NBN was seen as being difficult to use and get data out of. The front end of the NBN was described as clunky. Data is only available at a low resolution, and they do not pass data to LRCs – indeed the NBN is marketed as an alternative.
- It was suggested that a local portal to the NBN is needed, and that large consultancies could potentially develop their own NBN portal.
- The need for the NBN to hold habitat and site information as well as species data was also noted.

Other

- Online data provision could potentially form part of an SLA, either regionally or by county, but a pay-as-you-go service would probably be better for consultants.

Service Level Agreements (SLAs)

Advantages

- SLAs would be advantageous for LRCs in that they would be paid for in advance and therefore would represent a guaranteed income. The workload would also be more predictable.
- Small scale SLAs might be workable for consultants, and regional SLAs could also be useful and should be explored.

Disadvantages

- SLAs would need to have some sort of standardisation across the region which could be difficult as LRCs all work so differently. There might also be legal issues over standardising prices.
- While being a useful idea, it was felt that SLAs would only work when a consultant had a regular workload in a particular county. There is a danger that consultants wouldn't use the data searches they had paid for and would need to carry them over. Or alternatively the LRC could end up doing lots of data searches for very little money.
- The nature of consultancy work makes planning ahead very difficult and therefore SLAs might not be feasible.

Suggestions

- BRIE is planning to include clauses requiring data exchange in any SLAs they set up.
- The LRCs in Yorkshire have a regional point of contact for negotiating an SLA. This model could be looked at for use in the East of England.
- A flexible price might be necessary. If the data is provided online then the price needs to factor in the extra time it would take consultants to run the search themselves.
- SLAs could involve a '10 searches for the price of 9' offer. Or an incentivisation scheme such as every 6th search is half price?
- Over and above the standard data search, could the SLA include other expertise available from LRCs, such as some form of advice/interpretation/local knowledge? Could be a sheet attached to the data search flagging up locally important species and sites.
- It was suggested that maybe a pilot should be considered for a year first.

Other

- If a consultant has an SLA with an LRC they could use it as a demonstration of CSR (corporate social responsibility) and could, for example, display the LRC logo on their emails.

HABITAT DATA

Pros

- Anglian Water stated that they would find habitat data useful.
- Habitat data for Local/County Wildlife Sites and Special Roadside Verges/Roadside Nature Reserves could potentially be of use.
- Habitat data would be good for larger, broader landscape projects, but that this only involves maybe 30-40% of overall projects (non-urban areas).
- Even quite old habitat data can be useful as habitats don't tend to change very quickly – only the land-use changes.
- Habitat data can be more useful than some species data in informing biodiversity.

Cons

- Most of the consultants present thought that habitat data would not be particularly useful to them.
- Maps created from photos would require ground-truthing, and habitat data provided would only provide a snapshot. Consultants can look at Google Maps themselves and would have to ground-truth anyway. Clients may not have faith in the data and might feel like they're paying twice.

- While it would be useful to get an overview of the distribution of invasive species in an area, these data may be limited and invasive species records are available anyway as part of the Standard Service.
- The currency of County Wildlife Site citations is an issue.
- Habitat data is not discrete. Phase 1 and BAP habitat mapping attempts to put boundaries around areas.
- The metadata accompanying habitat data can be crude.

Other

- Habitat data could be provided as part of an SLA, and SLAs could also allow baseline habitat data to be gathered.
- LRCs are seeing an increase in the number of enquiries from the general public for habitat information – it is not just needed for planning purposes.
- There seems to be a lack of consistency over what habitat data LRCs should be collecting and providing. Many consultants use Phase 1 data, whereas Natural England and Local Authorities use BAP. There needs to be some way of linking the two – this could be where LRC expertise comes in?

GENERAL COMMENTS

Standard Service

- Overall the Standard Data Enquiry Service was considered to be good and welcome. It was suggested that it would be useful for it to be rolled out to other areas.
- The topic of accreditation was discussed by one group, where the question came up: is there any value to accreditation if there is only one LRC in a county? Responses to this included: Natural England funding may be attached to accreditation; it shows you are meeting a certain standard; it's not always the case of a monopoly – for example accreditation may be useful in Essex where there are other competing data providers.

Engaging with Consultants

- LRCs need to justify the cost of a data search. They need to emphasise that they are providing a value for money service and that it is not an easy service to provide. LRCs could make use of their websites and newsletters to do this. They could even show the 'timeline of a record' from recorder to consultant to demonstrate the time and effort on the part of the LRC.
- LRCs could provide GIS services for smaller, self-employed consultants who don't have the expertise in-house.
- Surveys and bio-blitzes could be not just for recorders but for consultants too.
- Other potential events that could be run: an open day at an LRC for the consultants in the region to see first hand what they do; an event during which consultants could meet recorders; an IEEM/LRC recorders day.
- LRC newsletters could be sent to consultants as well as to recorders to keep them informed with LRC developments.

Other

- Archaeological and historical records must be deposited with the LRC or archive centre by law, but this is not the case for biological records. The new planning guidance was addressing this problem, but this has now been shelved.
- Future funding is a big problem for LRCs.
- Utilities companies manage lots of land and should be considered for potentially providing some LRC funding.

- LRCs have some advantages over local groups in that while LRCs are impartial and professional, local groups often have hidden agendas and ask questions. Some local groups dislike each other and won't communicate amongst themselves, or are reluctant to give out data.
- It is becoming less financially viable for consultants to go to local groups or more than one group for records – it's just not worth the hassle of waiting for these local groups to respond.
- It would be really useful if LRCs could provide a grid reference converter (to convert to eastings and northings) on their websites. Also, a summary list of what all the species designations cover would be helpful. Could also potentially link from the website to the County Wildlife Site criteria?

Appendix 10. Summary of Automated Planning Application Screening Tools

Of the 38 Local Records Centres contacted by email, I received replies from 27, and eight of these are currently using variations of automated planning screening tools (plus two centres currently trialling one of the existing tools).

The eight planning screening tools are summarised below (in no particular order).

Greenspace Information for Greater London (GiGL)

Contact: Aldo Tanca (aldo.tanca@qigl.org.uk)

This screening tool, which is being developed by GiGL in partnership with Natural England, is based on ALGE's existing checklist, and involves a flexible template that can be customized to the local ecology with reference to i) type of activity ii) types of building/structures and iii) associated species and habitats. It aims to screen 100% of applications against the best available information, and provide planners with case by case information and guidance on their statutory obligations.

Each Authority has its own set of screening rules, thus allowing customization. The report content is determined via a screening form (directly maintained by GiGL), which is potentially customizable per Authority and available in Excel and html versions.

The system is run on a .NET framework based on the GiGL server. Local Planning Authority desktops just have an Excel automation, which pulls application details from the development control database, and an automated form to be compiled for each application (the form is necessary to determine the application details to the level of detail required by the ALGE rules).

The screening of single applications is done via a web interface in three steps. The form screen leads to an OpenLayers web map (location manually defined via postcode, point or polygon) and then to a .pdf report displayed directly within the browser.

Batch screening is performed by pulling a list of validated applications within a certain time range from the development control database.

The tool implements two different categories of triggers for flagging an application as relevant. This is also reflected in the screening report, which is divided in two sections: specific advice (e.g. relating to the type of activities and buildings involved) and data searches.

Ideally a Local Planning Authority should have their validation staff compiling the screening form for each application and pasting the resulting screening code in some multi-purpose field in their backoffice. The code could then be extracted from the field and included in the Excel list along with the other application details. After uploading the Excel spreadsheet to the tool via a web-interface, an email is sent to the user listing all planning applications submitted and which ones are likely to be relevant because of a) proximity of features and/or b) nature of the activities involved and buildings/structures affected. The email provides links to a report for each application and the reports can also be downloaded in bulk as a .zip archive.

Advice is then provided by the ecologist by either contacting the case officer responsible for applications directly or, more ideally, by directly accessing the development control backoffice and adding the comments to the application details.

Two sources of advice are provided to planners. i) General advice is identical for all LPAs. This is based on a London revision of the ALGE checklist, developed through consultation with Borough Ecologists, the Wildlife Trust and Natural England. It will also incorporate any Standing Advice from Natural England when this is available for London. ii) Local advice differs for each Authority and comes from the LPA ecologist(s). It translates their local strategies into practical action, and provides the closest thing to consultation with the Borough ecologist for potentially any application. Providing plain-English advice along with data searches enables planners with no ecology background to implement the suggestions. This removes the need for additional interpretation, while limiting consultation with the LPA ecologist to those cases where standard advice is not sufficient and consultation is therefore suggested.

South East Wales Biodiversity Records Centre (SEWBRc)

Contact: Dave Slade (david.slade@sewbrec.org.uk)

SEWBRc uses a custom written MapBasic program that links an MS Access database to MapInfo. The system is tailored to each Local Authority but the process for each is pretty much the same.

The planning list provided by the Local Authority first needs to be converted to a suitable format to be imported into the database. The time taken to do this depends on the format the list is supplied in (a very quick process if the list is supplied in Excel, much slower if it's a pdf).

Once in the database, the list is run, generating a HTML word document which automatically adds formatting (italicising pre 1980 records, highlighting sensitive records and records/designated sites within 50m of the planning application). A manual check of the formatting is done to make certain the automation has worked correctly.

Running the list takes between one and ten minutes depending on the number of applications, and the whole process takes between 30mins and three hours.

The system could, in principle, be modified for use in other LRCs but will need to be tailored for varying file structure and databases.

The Wildlife Information Centre (TWIC)

Contact: Claire Pannell (claire@wildlifeinformation.co.uk)

The Wildlife Information Centre's tool uses Recorder, ArcGIS and MS Access.

It requires customers such as the Local Authorities to send in their application data as GIS boundaries of the proposed development areas along with other details of the planning application (e.g. the proposal).

The screening data held by TWIC consists of an ArcGIS layer containing, amongst others, the boundaries of notable species records, habitats and designated sites (with 50m buffers).

The areas where the polygons of the two layers overlap are determined and an attribute table created containing fields from both layers. The attribute table is linked to an MS Access database (which means it does not need to be imported into Access each time). The queries convert the table into a form suitable for reporting by removing rows that don't have the necessary attributes for the report, removing duplicate rows and removing any rows relating to the buffer where the development

area also overlaps with the protected feature itself (as overlap with the feature is more important than the overlap with the buffer).

The customer report generated uses the data stored in the 'Report data' query.

The planning application screening process is quick and cost efficient.

North Wales Environmental Information Service (Cofnod)

Contact: Roy Tapping (roy.tapping@cofnod.org.uk)

An SQL server is used to store the species records, MapInfo/MapBasic is used to do the spatial queries and a Visual Basic utility generates the report. The whole process is controlled through another SQL server database that stores details of the planning lists and controls the outputs received (such as species sensitivity etc).

As planning applications are received in various formats, the first step involves manually editing them to database format. The list can then be imported into the database. In MapInfo the Enquiries workspace is opened, the grid references provided are checked and the screening tool is then run. An xml file is generated, and a Visual Basic application allows the file to be read and formatted.

Web browser reporting is used, with species, site and habitat data all together in one report. For each application, a summary is produced showing the number of protected, priority, threatened and local species and the sites intersecting with the search area. Species and sites within 50m of the application site are colour coded red. For each application there is a Google Maps data link to the Cofnod website. The data are organised into categories, and summarised (including the number of records for each species), to avoid long lists of records of the same species. Users can click on a link to concertina the details of individual records out if necessary. There is also a link to the metadata page of the Cofnod website.

Two reports are produced for each list; a full report and a public report, which has some data removed. The reports can also be opened in Word, formatted and then converted to pdf.

Cofnod usually receives lists of between 10-40 applications. It takes less than 60 minutes to process a list of about 30 applications.

Somerset Environmental Records Centre (SERC)

Contact: Tony Price (tony.price@somerc.com)

SERC developed BioPlan Version 1, which is currently being trialled by at least two other UK Records Centres.

The application is a very small .mbx file that runs in MapInfo. It has tables which tell it where your data is on the network or local drives. When supplied with a list of planning applications it follows rules set up in the tables and searches for the data. The system checks what protected sites and species are at the application site and within a specified distance of it and these results, in conjunction with specified key words, can either flag up an application for further comment from an ecologist or let it pass through the planning system.

For each planning application a text file and 1 or 2 bmp files are produced. Once complete, an MS Word template is opened and a macro (VBA) is started. This opens the output text files one at a time and loads in the text and bmp files. The template formats the information to a pre-defined layout set out in the template using

bookmarks. The report details the statutory and non-statutory sites and species at the application site and within a specified distance of it. The reporting part of BioPlan is currently being enhanced in version 2.

The planning information required by BioPlan consists of: a unique ID, a planning type code (PS2 code), a proposal title and a grid reference or polygon of the planning boundary. Each PS2 code can have an independent list of key words that, if found in the proposal title, will trigger a response. Other objects such as SSSIs or LWS can be set to trigger a response if 'hit' by the application or search buffer.

The application is mostly automatic, just requiring the two parts to be started manually. It takes 15-30 minutes to process about 80 planning applications, depending on the data involved.

BioPlan is a system which anyone can use, and may be edited to fit the needs of each Local Authority and LRC.

Yorkshire & Humber Environmental Data Network (YHEDN)

Contact: Dan Jones (dan.jones@humber-edc.org.uk)

The tools developed in this region are currently used routinely on a site by site basis, but screening the weekly planning lists is still at proof of concept stage due to problems in getting hold of the weekly planning lists from any of the Yorkshire & Humber planning authorities.

YHEDN have developed two planning screening tools which are currently both used by different record centres in the region. Both tools can be used to search for protected and priority species (for planning) but can also be used to score sites for habitat indicator species lists (typically used for local site assessment).

1. An online data search which can be batched using a MID/MIF MapInfo export of boundaries. The report collates data from our own databases as well as the NBN Gateway and ARKive. There are various options for output and these have yet to be standardised into a common product. You have the option of a summary, species list or record list. Each output type can be saved to Excel by pressing a button.
2. A MapBasic tool which carries out a live query to a Recorder database connected by ODBC. This effectively does the same job as the online tool but does not query the NBN Gateway or ARKive. It involves a live query of Recorder, as opposed to the online tool which works from a snapshot copy of the data. This tool works for much larger sites or much denser volumes of data where the online tool struggles, and is better at long linear sites such as pipeline routes.

In the past YHEDN have rejected the idea of providing any kind of advice so have not gone down the route of implementing the ALGE planning checklist. YHEDN are starting to look at this again however, in the light of a number of Yorkshire & Humber authorities not having planning ecologists in post.

Gloucestershire Centre for Environmental Records (GCER)

Contact: gcer@gloucestershirewildlifetrust.co.uk

The Gloucestershire planning screening process is only partly automated, but does save time from manually screening planning applications.

The process involves a MapBasic programme for MapInfo. As the Local Authorities don't provide their application sites as a GIS layer or a spreadsheet, the grid references and search area required have to be typed in manually. The programme then produces a spreadsheet of all the relevant "alert map" features within the search area along with a map. The contents of the report are pasted into a more advanced spreadsheet, the map is inserted and the whole thing converted to a pdf file. A batch of pdf files can then be sent off to the relevant planning authorities.

Biodiversity Information Service for Powys and Brecon Beacons National Park (BIS)

Contact: Piotr Ged (piotr@b-i-s.org)

BIS has set up a web based system to manage planning lists, so rather than it being a script or a single process they describe it as a 'planning list management tool'. Their automated system relies on a PostgreSQL database with a PostGIS extension for spatial queries. The code is written in Java related language so they use Apache Tomcat as a server.

The screening process has three steps. Firstly the planning list needs to be registered in the database. If the planning lists are supplied in pdf format (as they are at BIS), they need to be manually sorted (the process can be helped by using a parsing system). Secondly, the planning list has to be processed. Here the system finds the data, calculates additional information such as distance from site and removes duplicate records. Thirdly, the generated report is edited. Staff check through the resulting document and convert it to a pdf report.

The outcome of the process is a set of records in a database. These generated data are used to produce a report in ODT format (open office word format) which enables checking and post processing of the data. There is very little limitation over data output format – pdfs or shapefiles could be produced if necessary.

The process itself is quick. It takes between 5 and 15 minutes to run one planning list (the longest lists they deal with at BIS contain about 50 planning applications). The post processing of the data is the most time-consuming part.