A Code of Conduct for data management by Local Environmental Record Centres in Eastern England

When data are received by a Local Environmental Record Centre (LERC), the following happens:

- **Validation**: any data received (either on paper or electronically) are checked to ensure they include at least the minimum data standard of recording: what (Latin and/or common species name), where (location description and grid references if possible – six figure preferred), when (date of sighting) and who (observer/recorder of record). Paper records are digitised (entered onto computer) at this stage and all data are held in a 'holding pen' awaiting verification.

- **Verification**: as most data comes directly from the county recorder, they are already verified; in those instances where data do not originate from a county recorder, most are passed to the relevant county recorder or local expert to confirm species identities and sightings where possible. If any records are considered to be incorrect or questionable they are referred back to the original observer and alternatives may be suggested by the specialist, where possible. Where records have been submitted using online recording websites, these are verified using online verification tools, with the aid of photographs to confirm sightings, where available.

- **Database entry**: validated and verified data are entered onto the main database to be used and disseminated to others. Validated data awaiting verification are either stored separately (in the 'holding pen') or flagged as such (if on the main database) so that they are not disseminated to others unverified. Confidential records are also marked at this stage.

- **Database maintenance**: the ongoing management and updating of the main database is a continual process of adding, removing or changing records (e.g. from unverified to verified) and checking for duplicate records. This also includes nomenclatural changes and keeping informed of changes to assessments of species rarity and habitats.

- **Dissemination of information**: data held by each LERC are available to those who have a legitimate interest in the location of wildlife sites, species and habitats within a specified area. This includes environmental consultants, local planning authorities, educational institutions, conservation organisations and members of the public. A standardised minimum content for data searches is offered across the region, including metadata statements.

- **Establishment of a data sharing agreement**: data sharing agreements can be created for individual recorders or groups providing data to the LERC. These agreements cover things such as the frequency and type of data received, the resolution at which they can be shared with others (e.g. sensitive species) and with whom data can be shared.

- **Establishment of Service Level Agreements:** the most established and cost-effective method for LERCs to provide data and services to regular users, such as local planning authorities, is through Service Level Agreements (SLAs). An upfront payment is given to the LERC to cover a period of time (e.g. 1-5 years), during which the LERC will provide services and products as outlined in the SLA (e.g. X hours of data searches, data for Annual Monitoring Reports, planning screening searches etc).

When data are received by a Local Environmental Record Centre, the following applies:

- Most data are not disseminated to others until they are validated AND verified. Any unverified data are clearly marked as unverified, whilst the LERC continues to establish relationships with local recorders.

- If a dataset is received from a large organisation (e.g. a national scheme or conservation body), the LERC will ascertain where the data have come from i.e. a public participation survey or from specialists, and a judgement made on whether validation/verification is needed. If verification is needed, it will be treated as any other data needing verification.

- Personal information about data providers is not given to data users, though names of county recorders or verifiers may be supplied with records if permission is given to do so. The source of a record, if from a verified dataset (e.g. the Woodland Trust), may also be provided.

- Data may be provided to the National Biodiversity Network (NBN) Gateway so long as prior consent is given by the data provider.

- Data which are considered sensitive or contentious (e.g. concerning badgers, bats) will only be given as stipulated in a data sharing agreement between the LERC and data provider (e.g. at a reduced resolution).

- Where charges apply (i.e. for commercial data enquiries), LERCs do not charge users for the data *per se* but for the time and resources it takes to collate, store and manage this data, acting as central custodians of environmental information for each county. However, as a gesture of goodwill, the fee can be waived if no records are found within a data search. LERCs do not usually charge for non-commercial data enquiries.

Data managed by a Local Environmental Record Centre are kept safe and secure through:

- Ensuring that regular data backup processes and procedures are in place for each LERC, including the use of external hard drives, servers or offsite facilities.

- Following processes and procedures as outlined in individual LERC policy documents when handling and managing data.

- Ensuring that each LERC, whether independent or hosted by a Wildlife Trust or County Council, has a business continuity plan to be put in effect if the LERC is wound up e.g. data holdings transferred to another organisation, such as the Wildlife Trust or local natural history society, to safeguard until such time as resources would permit the establishment of a new LERC.

- Training dedicated staff and volunteers to manage databases more effectively and keep up to date with the latest software and changes.

- Recorder is the proprietary software used by most LERCs in the east of England to manage data. Recorder allows for data with different validation and verification statuses to be stored, flagged and searched. Recorder is a commercially available product, and its development history and updates are clearly documented by the software company creating it. All

dictionary updates and functionality changes etc are held by the company. It is also possible to find out who imported/amended a record, when any changes were made, when it was added to database, and other administrative statistics.

- Online recording websites are used by LERCs to collate and verify records submitted via online forms. Data from these sites is usually held in a "warehouse" managed by the Biological Records Centre and is accessed as required.

Other

- LERCs in the region, where possible, will be working towards official accreditation by the Association of Local Environmental Record Centres (ALERC), in which a series of guidelines and best practice for LERCs must be followed, ensuring transparency and consistency within the LERC network.

- LERCs are non-profit organisations; any profit remaining over and above the cost of staffing and data management is invested in the products and services provided to data users and data providers e.g. assisting local recorders to further recording effort in the county or by identifying and filling gaps in knowledge.

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