



Representing Drainage
Water Level & Flood Risk
Management Authorities

National Internal Drainage Board Annual Biometrics Survey

Guidance Document

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1 Introduction

Never has there been greater focus on protecting and enhancing our biodiversity as there is today. Ecosystem services provided to us by a healthy and thriving environment are now well recognised as being key to maintaining our own health and wellbeing. Internal drainage boards (IDBs) are collectively one of the largest managers of freshwater and wetland habitats and species. Consequently, IDBs have a critically important role to play in conserving and enhancing these habitats in particular.

2 Background

The development of IDB Biodiversity Metrics was a priority workstream agreed by the ADA Technical and Environment Committee. It was felt that urgent, more detailed and increased promotion of the actions IDBs undertake to support biodiversity and the environment was needed. Stuart Roberts of the NFU made the same recommendation during the close of his presentation at the ADA conference in 2019. The Defra Policy Advisory Group (PAG) on IDBs, and a number of other environmental stakeholders, have also requested information on “core standard actions” to evidence how IDBs contribute to national environmental policies and priorities.

There is also a strong political and social requirement for quantifying and valuing biodiversity. The Environment Bill/Act sets legally binding requirements for the Government to report on progress against the targets set out in the Government’s 25 Year Environment Plan. To help the Government to achieve this, the Bill/Act sets out a number of processes which are reliant upon the collection and analysis of quantitative environmental and biodiversity data. Those with legislated environmental duties such as IDBs can expect to be called upon more formally and regularly in the future to contribute such quantitative data in order for the national picture to be formed and trends to be assessed.

As a result, it was decided that the means of collecting a suite of simple biodiversity metrics in an efficient and reliable way would be developed. The metrics aim to capture “core standard actions”

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or quantitative habitat and species-specific data relating to activities which IDBs are known to undertake. Such data should be easy for IDBs to collect, provide positive data, and be of interest to a wide audience. The metrics should also help to demonstrate that IDBs engage positively with activities known to be supportive of wildlife and the environment and will evidence a contribution towards national conservation policy and priorities.

For details of all the design principles incorporated into the survey metrics, see Annex I.

3 Objectives

1. To collect from as many IDBs as possible, in a standard and efficient way, quantitative data relating to a specified range of habitats and species common to most IDBs which are supported by the activities of IDBs.
2. To use such data to develop simple, scalable and concise promotional material, relevant to a wide range of audiences, highlighting the habitats and species which are supported by IDBs and their work.

4 Benefits of quantitative biodiversity data to IDBs

Legislation

The requirement for IDBs to conserve and enhance biodiversity whilst carrying out their water-level management responsibilities has its source in a range of legislation and policy.

This requirement will be strengthened with the enactment of the Environment Bill/Act, which sets out that within one year of enactment that public authorities will have a duty to actively carry out strategic assessments of the actions they can take to enhance and conserve biodiversity, and then take that action. Every five years, the public authority will have a duty to produce a report detailing the actions they have taken to comply with the new duty in the previous five years and provide plans of action for the next reporting period. Public authorities with the greatest potential to enhance biodiversity will be designated by regulations following the enactment of the bill or royal assent. The regulations will also set out what quantitative data must be included in the reports.

By engaging with this annual Biometrics survey, an IDB can improve their confidence with the collection and reporting of such quantitative biodiversity data, ahead of any statutory data requests.

Biodiversity Action Plans

An important component within each IDB's Biodiversity Action Plan (BAP) is the monitoring and review of conservation and enhancement actions in order to identify whether the required outcomes are being achieved. Where the desired outcome is, for example, is an increased population of a particular species, or an increased number or extent of habitat provision, then quantitative data from before and after the actions are taken will help to determine if the outcome has been achieved. The data used for this determination will be the same as is being requested as



part of the biometrics survey so in many instances, one can be used to support the other and duplication can be avoided.

Funding

There are limited funding streams open to IDBs to support them in delivering their legislated duties, particularly their environmental duties. IDBs who can demonstrate environmental competence and success in delivering environmental targets are more likely to be attractive to those in control of allocating funds to support environmental enhancement projects. The Biometrics Survey is one tool which can help to demonstrate this. An IDB could choose to highlight its own survey contribution figures independently via their website, or through other partnership communications. ADA hopes that by publicising the national overall IDB contribution to biodiversity enhancement it will help to attract further funding for IDBs collectively and ensure that they are not overlooked for support.

Reputation

Environmental knowledge has increased within the mainstream public in recent years and so there is more public scrutiny of actions which are perceived to be damaging to the environment. Some IDB community members may not be aware they are directly influenced by IDB activities, even in terms of water level management and much less in terms of their environmental conservation contributions. IDBs can improve communications with such communities to help them understand more about the full scope of the work of IDBs. The Biodiversity metrics data collated by an IDB is a quick and accessible way to present the environmental achievements of the IDB. It could help an IDB better engage those who would otherwise be unaware, or uninterested in the role of the IDB. This can help to harness improved support for the IDB and its work within the local community.

With the publication of the combined national IDB biometrics through ADA, the reputation for IDBs as being valuable custodians of a range of biodiversity will also be strengthened.

5 Completing the Survey

ADA encourages each IDB to complete as many of the survey questions as possible. The survey questions have been grouped into nine metrics, designed so that each IDB should be able to complete at least one of these. They are to be gathered from IDBs for each financial year. The survey is completely voluntary and an IDB can choose to complete as much or as little as they wish.

Guidance has been provided next to each metric within the spreadsheet to aid completion. However, if anything is unclear then ADA can be contacted for assistance at admin.ada.org.uk. Where it is not certain whether biodiversity work undertaken by an IDB can be recorded in a metric because it does not clearly fit within any given category, it can be included under the



"other (state)" category with some background information also provided in the Additional information box to support its inclusion.

As this is the first time the survey has been issued, it is intended to serve as a trial so that any issues with the spreadsheet can be ironed out and amended for next year. It will also allow IDBs to consider whether there are any data collection procedures they may need to implement in order to collect information for the next reporting period. As such the consolidated 20/21 data will only be distributed amongst IDBs.

If any "bugs" are discovered with the sheet and fields do not work as expected, please report these to ADA ASAP so they can be fixed.

The survey will generally be issued in early March, and the deadline for submission each year will be approximately mid-September. As this will be the first submission and the survey has been issued later than it would be usually, the deadline will be 31st December.

6 The Metrics

The metrics are designed to cover a broad range of activities that an IDB may undertake to help conserve and enhance biodiversity within their drainage district. These activities were identified by a panel of IDB representatives as those for which quantitative data is already gathered, or could be gathered relatively easily, on an annual basis. Below is a short description of what data each metric aims to capture:

1. Ecological Surveys

This metric collects information on the number of formal ecological surveys undertaken during the reporting period by or on behalf of the IDB. A range of species are included such as water vole, bird and bat as well as wider scope surveys such as those conducted for Environmental Impact Assessments (EIAs). Most IDBs will undertake some form of biodiversity survey each year. For example a survey of vegetation prior to maintenance operations in order to identify the presence of any nesting birds. The results of the survey are not required. The metric data will be a valuable means of identifying local population status and trends and will help to evidence compliance with some of the main wildlife legislation.

2. Annual Habitat Maintenance

This metric gathers data about the annual maintenance techniques used by the IDB which are undertaken with the aim of conserving and enhancing biodiversity, as detailed within the ADA/Natural England Drainage Channel Biodiversity Manual. The metric is split into four sections covering the maintenance of:

- Channels of watercourses,
- Banks of watercourses and flood embankments,



- Trees and bushes, and
- Other habitats managed.

This is arguably one of the most valuable metrics as it can demonstrate that IDBs undertake their functions in a way that is supportive of biodiversity in general rather than individual species. This helps to demonstrate compliance with the general biodiversity duty as set out in the Natural Environment and Rural Communities (NERC) Act 2006 and other policy and legislation.

The table below lists the Drainage Channel Biodiversity Manual techniques referred to in the survey and the page they can be found in the manual:

Ref:	Description:	Page:
	Channel	
	Managing and promoting aquatic and marginal vegetation	
CA1	Selective removal of aquatic plants to permit recolonisation 1	53
CA2	Selective removal of aquatic plants to permit recolonisation 2	54
CA3	Selective removal of aquatic plants to permit recolonisation 3	55
CA4	Selective removal of aquatic plants to permit recolonisation 4	56
CA5	Leaving headwaters untouched	57
MA1	Selective removal of emergent plants to give a sinuous effect	74
MA2	Selective removal of emergent plants	75
MA3	An emergent fringe on a single side	76
MA4	An emergent fringe on both sides	77
	Enhancing channel morphology	
CL1	Scalloping vegetation and underlying silt to create meanders	61
CL3	Creation of pools	63
CL4	Over-deepening the centre of the channel	64
CC1	Selective removal of waterplants to permit recolonisation	65
MC2	Submerged Berm	82
MC3	Submerged berm and linear reedbed	83
BC4	Stabilising banks using natural materials (coir rolls, faggots, wattle, stone)	106
	Banks	
BA1	Cutting technique - targeting specific wildlife interest	84
BA2	Cutting technique - differential cutting parallel to waterline	85
BA3	Cutting and removal of bankside grass and similar non-woody vegetation	86
BA4	Cutting technique - cutting by hand	87
BA5	Cutting technique - hay cut	88
BA7	Grazing	90
BA16	Management of drove roads	99
BA8	Bank cover - scrub	91



Trees, hedges & bushes		
BA9	Pollarding willows	92
BA10	Trimming of overhanging branches	93
BA12	Coppicing	95
BA13	Singling Coppice	96
BA14	Laying hedges	97
Habitat creation / management		
CC4	Reedbed to reduce diffuse pollution	68
MC1	Re-establishment/redistribution of emergent plants	81
ML1	Re-establishment/redistribution of emergent plants	80
CL2	Re-establishment/redistribution of aquatic plants	62
CC2	Re-establishment/redistribution of aquatic plants	66
OC1	Borrow pits	112
CC3	Creation of pools	67
BC5	Hedgerow planting	107
BC6	Introduction of bushes and trees	108
BC7	Planting of trees or shrubs at drain junctions	109
OC2	Creation of willow carr	113

3. Artificial Habitat Creation

This metric gathers data on the number of artificial habitats for a range of species that have been created or installed during the reporting period. Many IDBs provide artificial habitats such as bat or bird boxes and some provide more complex habitats such as otter holts. It also aims to gain information on the number of artificial habitats already provided and maintained regularly by IDBs.

4. IDB-led Habitat Creation

The metric captures data which indicates the extent of valuable habitat that has been created or restored by IDBs within the reporting period. Habitats created or restored which correspond to the definitions provided in the UK Habitat Classification and/or the ADA/Natural England Drainage Channel Biodiversity Manual can be included. Examples include, woodland, pollen and nectar areas and wetlands but also some smaller-scale habitats created as a result of re-profiling or repairs such as coir rolls and berms.

5. Fish and Eel passage

Any barriers to the passage of fish and / or eels that an IDB has removed or improved within the reporting period can be included in this metric. This includes physical modifications (such as fish-friendly pumps), as well as operational modifications introduced during the year (such as revising pump operation times or utilising sluicing more frequently where possible). Any fish or eel refuges which have been created can also be recorded.



6. Invasive Non-native Species

This metric records the number and/or extent of invasive non-native species (INNS) present that have been controlled by IDBs within the reporting period. The data sought relates to planned or reactive actions to control present INNS, rather than preventative actions such as those detailed in an IDB's Biosecurity Policy.

7. Biodiversity Training

The number of IDB personnel including Board members, staff, volunteers and contractors who have received some form of biodiversity-related training within the reporting period can be recorded by this metric.

8. Partnership Working

The metric captures data on the number and type of contributions an IDB makes to partnership projects with a biodiversity focus, aside from habitat creation. For example, many IDBs provide data and access to sites for research projects, financially support local initiatives, or attend and support local nature group meetings.

9. IDB-partnered Habitat Creation

This metric gathers data on the extent and type of habitats which have been created within the reporting period with the assistance of the IDB. These projects are often initiated and led by local landowners or managers within the district but benefit from IDB expertise and infrastructure to help to create and support the habitats, such as wetlands. The metric can also capture an IDB's passive support of other habitat creation, such as financial contribution towards a woodland creation project.

7 Data Use

The survey data provided to ADA by each IDB will remain anonymous. Each IDB's data will be collated with data received from other IDBs to develop a national set of statistics to highlight the valuable contribution that IDBs make to conserving and enhancing biodiversity each year.

ADA encourages each IDB to use their own data to promote their own environmental achievements and contributions.

Many IDBs may be already involved with many other valuable environmental projects that are not linked to any of the habitat or species metrics captured. ADA will aim to ensure that information about such projects continues to be captured, either through the IDB1 form that IDBs submit annually to Defra (e.g. annual biodiversity expenditure), or by other means (e.g. case studies and project reports).



Annex I

Design Principles

- 1) To design simple but objective metrics that are easy to understand and identify by those collecting data and those reviewing it
- 2) To design metrics which capture work already being undertaken by many IDBs which is supportive of the environment and/or biodiversity.
- 3) To select habitats and species that are common to most IDBs and ensure at least one habitat or species metric is relevant to every IDB.
- 4) To encourage and capture work that integrates the theory of creating and enhancing nature corridors and networks in line with key current environmental policy
- 5) To minimise the need for any additional data collection on top of that which should already be available through operational records.
- 6) To ensure that the habitats and species included are easily recognised and valued by a wide range of audiences. This would be in line with the developing Local Nature Recovery Strategies, whereby iconic UK species, threatened species and nature networks are being considered and supported.
- 7) Encourage and capture work that integrates the theory of diversity, spatially and temporally, regardless of whether those habitats or species are common or rare.
- 8) Select metrics which can be captured on an annual basis and which have the potential to be increased each year.
- 9) To invite and encourage IDBs to take further action to support biodiversity through their simplicity
- 10) Data should be easy to corroborate should an interested party wish to do so through a Freedom of Information (FOI) request.