Ecological Monitoring System Australia

Datasheets: Basal Area Module



Version 2

4 July 2025

Version control

Readers are advised that this datasheet will undergo revision as the EMSA Monitor app undergoes new refinement and updated versions become available. The names of the fields may vary slightly from the modules and the datasheet during this process.

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| **Datasheet version** | **Date** | **Version update overview** |
| 1.0 | 8 May 2024 | Release of the datasheet matching Monitor version 1.0.1 |
| 2 | 4 July 2025 | Release of the datasheet matching Monitor version 1.0.7 |

Instruction

This datasheet can be used if the Monitor app is not accessible at the time of a field survey. The datasheet has been designed to match the EMSA module manual and the Monitor app workflow. However, there are some minor differences, as capturing the quantity and complexity of the data in hard-copy form is difficult to replicate. At times some additional information or less information is collected on the datasheet. Examples of this are where the app would readily collect the location, date and time information of each input with minimal user input, but the datasheet version only collects the survey start and end location, date and time.

Surveyors must follow the EMSA module manual as though they are using Monitor, i.e. by following the Instructions and Procedures section of the relevant protocol, but instead of entering the data in Monitor, data is entered on the datasheet.

**Surveyors are reminded to check the module manual to ensure that the mandatory pre-survey and prerequisites have been completed prior to undertaking the module.** A key example is where the Plot Selection and Layout Module must be completed prior to undertaking all plot-based protocols.

This datasheet can either be printed and used in the field using a pencil or used digitally on a device.

**Regional Delivery Partners are responsible for manually entering datasheet-collected data into Monitor once the app is fully functional again. The Department of Climate Change, Energy, the Environment and Water require that digital scans of the datasheets be uploaded into MERIT.**

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| **Have you completed the Plot Selection and Layout Module?** – If no, please undertake this module first before proceeding | | | | | | |
| Survey details | | | | | | |
| Context\* | | | | | | |
| Project\* | | Plot\* | | Visit\* | | |
|  | |  | |  | | |
|  | | | | | | |
| Observer name\* | | Start date(dd/mm/yyyy) &  time (24 hr)\* | | End date(dd/mm/yyyy) &  time (24 hr)\* | | |
|  | |  | |  | | |
| **Basal Wedge Observation** | | | | | | |
| Basal Sweep Sampling Point\* | Species (floristics voucher)\* | | Group species ☑ | | Basal area factor (BAF)\* | # ‘in’ trees  (must be greater than 7) |
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| **Basal Sweep Sampling Point** | |  | **Basal area factors (BAF)** | |
| N | North |  | 0.1 | |
| NE | Northeast |  | 0.25 | |
| E | East |  | 0.5 | |
| SE | Southeast |  | 0.75 | |
| S | South |  | 1 | |
| SW | Southwest |  | 2 | |
| W | West |  |  |  |
| NW | Northwest |  |  |  |
| C | Centre |  |  |  |

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| **Have you completed the plot selection and layout module?** – If no, please undertake this module first before proceeding | | | | |
| **Survey details** | | | | |
| Context\* | | | | |
| Project\* | | Plot\* | | Visit\* |
|  | |  | |  |
|  | |  |  | |
| Observer name\* | | Start date(dd/mm/yyyy) &  time (24 hr)\* | | End date(dd/mm/yyyy) &  time (24 hr)\* |
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|  | | | | |
| Survey Area\* | | | DBH Instrument\* | |
| 40 x 40 m | 100 x 100 m | |  | |

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| **DBH instrument** | |
| DIA | Diameter tape |
| TAP | Tape Measure |
| CAL | Tree caliper |

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| **Basal Area DBH Measure Survey (start)** | | | | | | | | | | | | | |  | |  |
| Tree #\* | Location\*  (waypoint, lat/long) | Species (floristics voucher)\* | Dead (Y/N) | Multi stemmed (Y/N) | Buttressed (Y/N) | Ellipse (Y/N)  (if DBH tool is Tree Caliper) | Stem ID (1, 2, 3, 4) (if multistemmed) | POM (m)\* (Default 1.3 m) | DBH (cm)\*  (If DBH instrument is Diameter tape or tree caliper) | Circumfrence (cm)\*  (If DBH instrument is tape measure) | Reach POM (m)  (If buttressed) | Reach Diameter (or circumference) (cm) (If buttressed) | POM 50 cm above Buttress (cm) (If buttressed) | | Diameter (or circumference) 50 cm above buttress (cm) (If buttressed) | |
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