Chapter B3 - STAND HISTORY

Standard for Reporting Stand History

Purpose

The purpose of this standard is to describe the completeness and reliability of the stand records used as a source of information for describing the current condition of the forest and forecasting woodflows and cashflows.

STANDARD B3.1

For stand history, the forest description shall:

Stand history

- **describe records (including the name of the forest management information system used) available for use and those which have been used in preparing the forest description (including the rationale for the selection or rejection of data from the records);**
- **describe the completeness of the stand records on tree crop characteristics:**
  - **species**
  - **genetics**
  - **establishment year and month**
  - **coppice year and month (if applicable)**
  - **initial stocking and establishment method**
  - **thinning history (age and residual stocking)**
  - **pruning history (age, pruned height, number of stems pruned, Diameter at Breast Height (DBH), Diameter Over Stubs (DOS))**
  - **fertiliser application and foliar sampling**
  - **adverse events (fire, wind, drought, land movement, pests, disease)**
  - **measurement data (stocking, height, basal area)**
- **describe the procedures used in the collection, and the recording and maintenance of the information contained in the forest records;**
- **describe the reliability of the information contained in the forest records which have been used in preparing the forest description;**
- **describe the procedures followed to review and audit the reliability of the records.**

  As a minimum the audit will:
  - **review procedures used for collecting, recording and maintaining the information**
  - **undertake compliance testing depending on the results.**

  Audits should have regard to the materiality of the information or the purpose for which the forest description is prepared; and

- **describe the steps taken and assumptions made to address deficiencies in the information available in the stand records.**

Guidance Notes on Reporting Stand History

Importance of stand history

Records of the physical events and measurements that have occurred in stands constitute an important part of the forest description. Stand history is a record of what has occurred and what presently exists, and is used in forecasting what will be in the future. This will likely be in respect to both quantity and quality and can have a considerable impact on forest value.

Form and substance

Like financial records, stand history may be kept on paper or a computer-based record system. Whilst the latter will allow easier retrieval and analysis, it is the substance and accuracy rather than the form of the records that is of importance.

What to report

Both crop and site characteristics should be reported. Guidance Notes for crop characteristics are given below.

Crop characteristics

Species
Influences growth, yield and value.

Genetics
Influences growth, yield, log quality and value. Original certificates or reference to records may allow genetic rating to be identified and adjustments made for growth. Any adjustments made for genetic gain should be supported.

Establishment year and month
Often available from planting records (alternatively from increment borer or ring count), this allows the calculation of current age. Some checks can be performed via height, age and site index comparisons.

Initial stocking, thinning and pruning history
These records allow for the modelling of silviculture and internal/external tree characteristics that impact on value. Records of pruning and pruning height are important because these events can significantly impact on value, yet some years after the event they are difficult to verify by other than intensive destructive sampling. The emphasis should be on data derived from inventory/post-operational assessments rather than silvicultural prescriptions or intentions.

Fertiliser application and foliar sampling
Records of fertiliser applications and/or foliar sampling are important in areas where there are known growth limitations and responses to fertiliser. Any adjustments made for fertiliser gain of foliar nutrient levels should be supported.

Adverse events and timing
Events such as fire, wind, drought, land movement, pest attack, disease and physical damage (e.g. from production thinning operations) are important as they influence future growth, yield and value.

Measurement data
This can be in the form of quality control assessments, mid-rotation inventory or pre-harvest inventory.

Inventory

Where records are non-existent or incomplete some gathering of data or inventory will likely be required. The design of such an inventory will depend on the specifics of the information sought and the purpose of the investigation. Whilst it is difficult to specify the level of precision in a general sense, inventory design should address the matter of confidence in the estimates that are produced.

Audit or verification

Because of their bearing on forest value, records of stand history, like financial records, should not be accepted at face value. Rather, it is appropriate in most cases for the forest valuer to review/audit the reliability of the records.

An audit is an objective systematic review process. It involves selecting and evaluating evidence for the purpose of ascertaining the reliability of the information contained in the forest records. Any audit should include a description of the procedures followed to audit the reliability of the records.

As a minimum an audit of forest records will:

- review procedures used for collecting, recording and maintaining the information;
- undertake compliance testing, depending on the results of the review; and
- state the valuer's opinion on the reliability of the information.

Disclosure

The valuation should clearly detail the basis of the information used (such as existing records and verification of these records), or independent inventory, and highlight any adjustments to stand history records or assumptions made where information is lacking.

Revision History

Original Standard	Released in May 1999
Revision in August 2020	Main changes are: • requiring (Standard B3.1, point 1) the forest management system used to be named; • including (Standard B3.1, point 2) coppice year and month and foliar sampling as potential tree crop characteristics; • including (Standard B3.1, point 3) the need to describe the procedures used in the collection, as well as the recording and maintenance of the information contained in the forest records; and • including (Standard B3.1, point 5) in the audit a review of procedures for maintaining the information, as well as collecting and recording it.