

# Protocol for management of biodiversity data

Nationaal Herbarium Nederland

## 1. Ownership:

- a. The Nationaal Herbarium Nederland (NHN) builds and maintains a database with data of specimens and species. The NHN is the owner of the database, and, because each of the NHN branches is part of a university, the universities of Leiden, Utrecht and Wageningen are co-owners.
- b. Ownership of the data does not rest with the countries from which the plant material was taken.
- c. Partly exceptions in the ownership exist for joined database projects with herbaria of other countries: ownership is per record and shared with (an) other institute(s) if duplicates of the same material are present in the institute(s) involved in the project.

## 2. Protocol:

This protocol is accepted by the NHN, and the university councils. The NHN is responsible for implementation of the protocol. Changes in the protocol will be enforced after approval by the NHN Board in which the University councils are represented.

## 3. Accessibility:

There are three degrees of access: limited reading, full reading and downloading.

1. Limited reading: Part of the data of each herbarium specimen may freely be read via internet: name of species (with authorship), collector and number, date of collecting, country of origin, herbarium where specimen is held.
2. Full reading of complete records (herbarium specimens): Limited to staff of the NHN and researchers in cooperative projects. Other persons may request access to the database after stating what they like to see, for which purpose, and how they like to use the data. Use for purely scientific reasons will usually be free of charge, commercial use will be charged. In the latter case, the NHN (or collaborative projects as meant under 1b) will first charge the applicant before the information will become accessible.
3. Downloading data: the same applies as for full reading, only the screening of the applicant's purposes will be more strict and the possible fees are higher.

## 4. Possibilities of access:

The screening committee has to decide if any purpose as circumscribed by a potential user, must be classified as a 'commercial purpose' or not. 'Commercial purpose' means the generation of money by sale of a product or by any other activity, accomplished through processing the data.

There are four main categories of use:

1. Use by staff and students of the NHN:
  - (voluntary) scientific staff has free access to all data, to view and to download;
  - students have a similar free access to the data during the time they work within the NHN and only under the supervision of their tutors.
2. Use without a commercial purpose:
  - scientists, who collaborate in our joint projects, have free access to all data, to view and to download during the time that they are active in our joint projects;
  - students of collaborating scientists (see former bullet) have to fill in the questionnaire together with their coach. The student receives full rights to the data. Student and coach are jointly responsible for what a student does with the data;
  - other natural history scientists and amateurs may obtain free or limited access to the database, sometimes after payment of a bench fee. This is to be decided by the screening panel.
3. Use with a commercial purpose:

For such a use (by a natural person, a firm or a company) a request has to be sent and a sum has to be paid every time one wishes to read the database / wishes to download from the database. For each request, the purpose will be judged and a price has to be agreed upon and paid before the visit.

Use by government agencies:

In principle, government agencies obtain free access to all data of herbarium specimens collected in their own country (repatriation of knowledge). However, in order to prevent misuse agencies have to follow the same procedure as other non-NHN staff.

### **5. Procedure:**

1. Applicants (categories mentioned under 4) have to apply for access to the database by filling in a (web) form in which they state their background (employer, position), the extent and purpose of their visit to the database (e.g. for scientific study, during three years, certain genera of the Annonaceae, including the possibility to download), and the methods with which they will analyse the data.
2. A panel of NHN scientists will screen the requests and grant a possible permission (in case of collaborative projects as meant under 1b those projects will screen the application and grant permission).
3. After permission (and payment of a possible fee) applicants will receive a contract.
4. Once the signed contract is returned a password and a user name will be issued, both linked to the agreed access of the database.
5. A computer program will check possible misuse of the permission and will revoke the permission automatically and permanently if misuse is observed. This will be stated in the contract.

### **6. Obligations:**

1. In the contract, users affirm that they will not use the data beyond the scope outlined in the contract. Non-commercial users state that they will not use the data for any commercial purpose, that they will not share their data with others, nor sell the data. After finishing their project, they have to destroy the data.
2. If the data are used for analyses, then users will send the results and conclusions of their analyses to the NHN prior to publication. The NHN then still has the liberty to revoke the use of the data if the NHN can demonstrate that the results and conclusions are incorrect or false.
3. Users that wish to publish (part of) the data in an electronic form (including internet), have to indicate this in the questionnaire, so that the contract can include specific regulations to this end. If the plan for electronic publication arises during their period of access, they have to contact the NHN so that the contract can be adjusted and their access to the database can be changed.
4. In every publication in which a user mentions some of our data, the user has to acknowledge the NHN with its full name Nationaal Herbarium Nederland. Copy-right statements have to be made in all appropriate places. In addition, the NHN should receive a copy of these publications.

### **7. Special restrictions:**

Access to several data may be restricted, e.g. to species of the CITES list, and maybe to other plant groups as well. Governments of countries in which the specimens have been collected, may ask for such restrictions, and the screening panel (or organisation as meant under 1b) that grants permission may invoke additional restrictions, especially in cases of downloads for commercial purpose.

### **8. Responsibility:**

The NHN makes an effort to present accurate data that are updated when necessary. Notwithstanding this, the NHN does not take responsibility for the correctness of all data, nor for the consequences that might proceed from errors in the database.

The NHN disclaims liability for use of the database.