

MANUAL OF GRASSES FOR THE CONTINENTAL UNITED STATES AND CANADA

A project funded by the Agricultural Research Service, United States Department of Agriculture, Utah Agricultural Experiment Station, and Utah State University

Newsletter 10

November 13, 1997

Despite intentions to the contrary, it has been over a year since the last Manual Newsletter. It has been an active year, one that has seen considerable progress and important decisions being made. Because the decisions affect all aspects of the project, we are presenting these before the progress report.

FORMAT

In the last newsletter, we stated that the *Manual* would be coming out in parts. It was Barkworth's impression that this was acceptable to the U.S.D.A. In February of this year, she found out she was wrong. The *Manual* must come out as a single volume. This has had a significant impact on our plans. In fairness to the U.S.D.A. representatives, we had never formally requested the change in publication plans to publication as a series.

PUBLISHER

The goal of the U.S.D.A. in funding the *Manual* project has always been to provide an affordable resource for grass identification, one that might reasonably be used in agrostology classes. Given the price of textbooks nowadays, this could mean up to \$100, but not \$300. After considering possible alternatives, the most attractive is publishing the *Manual* as a document of the U.S. Government. This alternative became available in the last few years as a result of policy changes at some government level far above the *Manual* project.

Publication as a U.S. government document has two major consequences. First, there can be no profit made. The cost of the document must reflect the actual cost of production, shipping, and handling, the price geared to recovery of these costs, not making a profit. Second, U.S. government documents cannot be copyrighted. If the project were designed to make money, the latter aspect would be unappealing, but it is not.

The lack of copyright means that the material in the *Manual*, including the illustrations and distribution maps, can be used without even asking permission. This does not, of course, remove the ethical obligation to acknowledge one's source.

There is one problem associated with the lack of copyright: in order not to lead people into temptation, *all* the illustrations must either be original or redrawn from non-copyrighted materials. Technically, some illustrations could retain their copyright, but this would be annoying for would be users as well as difficult to enforce. We are, therefore, seeking a level of funding that will enable the *Manual* to be completely copyright free (see below).

File availability. The decision to make the *Manual* completely copyright-free has led to two other decisions. The first is the most significant. We have decided that we will make the computer files themselves available in some easily accessible format, probably Microsoft Word® for text material and Adobe PhotoShop® for the line drawings and distribution maps, these being the programs in use at the Intermountain Herbarium.

We are also looking into making the distribution files that we have developed here available, together with a runtime version of the mapping program we use (currently ATLAS ver. 2, but ATLAS ver. 4 or ArcView-pc by the time of the next newsletter). There are two files for each genus, one having county-level data for the contiguous U.S., the other being location data. The location data are tied to their source (e.g., a specimen or published map). The county data are also connected to their source, but not so precisely.

The problem is that some of the data were provided for use by the *Manual* project, but not for general distribution. Out of respect for the work that goes into developing such data, we must eliminate these records or provide a royalty to the data providers before making our files available.

We would also like to find a way to enable the maps to be updated. This will be a separate project. One of the goals of the project design will be encouraging participation by *all* herbaria and taxonomists in improving our knowledge of grass distributions. We would also like to see contributors being given the opportunity (but not the obligation) to maintain the records for "their" genus. Clearly, these ideas bring up a host of issues, including training and compensation. Reason enough to consider it a separate project!

CITATION

Technically speaking, "North America" includes Greenland and much of Mexico. The *Manual* has never included Mexico and, a year or so ago, we decided to exclude Greenland. There were several reasons for doing so, one being that its flora is currently being studied by taxonomists based at the University of

Copenhagen, another being that its inclusion increased the number of taxonomic problems needing resolution. Given the need to wind up the *Manual* project, we took the easy way out. This led to a reconsideration of the title of the *Manual*.

The change to "Continental United States and Canada" provides a more accurate description of its geographic scope. The United States is mentioned first because the funding and most of the contributors are from the U.S. The change from "of" to "for" indicates that some of the species are introductions that have not become established in the region. The author citation will be Barkworth, M.E., K.M. Capels, and L.A. Vorobik (Editors). The remaining details will be decided at the time of publication.

INTERACTION WITH FLORA NORTH AMERICA

Last summer, Dr. David Murray contacted Barkworth to discuss how to develop a more productive interaction between that project and the *Manual* project. As a result of that, and subsequent discussions, Barkworth and Vorobik will be meeting with representatives of FNA in St. Louis this December.

Everyone concerned is agreed that collaboration is highly desirable. The purpose of the meeting is to decide how we can do so most effectively. "Most effectively" includes trying to minimize the demands placed on contributors while maximizing the benefits of having two projects focussed on the same group of plants.

Once the *Manual* is published, FNA will be able to use the files created for the *Manual*, just as any other interested person or organization will be. The question is whether there are some ways in which we could cooperate to get the *Manual* out faster and the FNA volumes out more efficiently. All of which begs the question of when the *Manual* will come out. On or before December 31, 1999. Preferably before, as far before as possible.

We will keep you informed about further developments. For now the most important aspect is that collaboration between FNA and the *Manual* is being actively pursued.

PROGRESS

Text. We have complete treatments for all but two genera, and these two are almost complete. Authors whose texts have been through the full editing and revision process will shortly be receiving a "final copy" of their treatment for a last check. Progress on the other manuscripts is being made, but the longer manuscripts take a lot of time. This also means that the process gets interrupted as other critical deadlines come around.

Species order. Some contributors, despite a request not to do so, have treated the species in alphabetical order. In such instances, we are re-ordering the

species to follow the key. This places species with common keying characteristics together. This will help those of us who like to look back and forth through illustrations of species similar to the one that we have keyed out, just in case we made an error. It will also help economize on illustrations.

We are adhering rigidly to an average of 175 words for each species and generic description. Keys and citations are excluded from the word count. There are two very simple reasons for this limit, total length and cost. The *Manual* is going to be a hefty piece of work, not one that one really wants to put in a backpack, but we do need to keep its size under control. Cost is a factor because the paper cost will be the most significant factor in determining the price of the *Manual*.

File conversion. At present, all our files are in WordStar for DOS. We have come to realize that we shall need to convert them to a more widely used format for transmittal to a page design program. We are fortunate in that Dr. Stephen Clyde of the Computer Science Department at Utah State University has developed a macro that, in combination with a WordStar Macro and Microsoft's WordStar conversion program, converts the files, maintaining the formatting, indexing, and special characters. The indexing will still need some work, but it will not be necessary, as we had feared it would be, to reenter every indexed phrase. The formatting of the keys will also need to be corrected, but this will occur in the page design phase rather than in the document conversion phase.

Synonymy. We are planning to publish the synonymy for the *Manual* in 1998. Contributors will be given a chance to review their genus before it is published. Initially we were thinking of making the synonymy available solely as a compact disk but, in response to a few comments, we are looking into the cost of paper publication. The compact disk version will be in a Microsoft Word file.

The synonymy is as complete as we can make it. We went this route rather than a minimalist route because many taxonomists do not have easy access to publications that those working at major herbaria take for granted. We considered the Web as an alternative means of presenting the synonymy, but the feedback we have received is that people prefer something that is not Internet dependent. Access times are often slow and, if one is not at an institution that picks up the cost centrally, it can be expensive.

Our present thinking is that the *Manual* itself will contain a compact disk of the full synonymy, but that the index will provide information about names that are not accepted in a manner similar to that in *Flora Europaea*. The citation for the synonymy publication will be:

Capels, K.M. and M.E. Barkworth (Editors). 1998. *Names applied to grasses found in the continental United States and Canada*. Intermountain Herbarium, Utah State University, Logan, Utah.

Contributors will appreciate the appropriateness of listing Capels as senior editor for this publication.

Illustrations. Vorobik has started working on the illustrations. In order to complete them within two years, she has recruited some other botanical artists to assist her, but she will be the illustration editor for the *Manual*, i.e., she is overseeing all the illustration work.

Vorobik uses the identification keys to guide her in selecting the features to illustrate. Whenever feasible, she is using the illustrations in [Hitchcock's Manual as a starting point, supplementing them as needed](#) to show the diagnostic features used in the keys.

To ensure the accuracy of the illustrations, Vorobik needs 2-3 representative herbarium specimens for each taxon illustrated (which will be all except those infraspecific taxa that differ only in length measurements from each other). In some instances, e.g., large genera or genera in which significant taxonomic changes have occurred, we shall be asking the contributor's assistance in obtaining such specimens. All specimens consulted in preparing the illustrations will be annotated. Contributors will be asked to comment on pencil versions of the illustrations for their taxa.

Distribution maps. We have begun collecting and integrating data from Canadian sources, plus some revisionary treatments. These are, in some instances, significantly modifying the information that we have received from a contributor.

We recognize that the time and cost involved in borrowing enough specimens to determine the distribution of a species is often beyond a contributor's resources. The approach we are taking will help ensure more accurate distributional data than would otherwise be available. We ask that contributors look at the maps we send to determine whether some of the records are likely to have been based on misidentified specimens or a different interpretation of a species.

We shall give preference to a contributor's map in developing the maps for the *Manual*, but shall also allow contributors to say "Use the one that you have developed". The pair of maps shown will indicate why we think that this may be the preferred option in some instances. They are for a well-known species that has not undergone any changes in its circumscription.

We shall only be publishing maps for species, not infraspecific taxa. The reason is quite simple: most published sources do not provide information about infraspecific taxa.

We are very grateful to the many individuals and institutions that have provided distributional data to the *Manual* project. A complete listing will be included in the front of the *Manual*.

Project completion

We have to provide the U.S.D.A. with a completed text manuscript for the *Manual* on January 30, 1998. We shall. It will not be ready for publication, i.e., there are still questions embedded in some treatments and some have not yet been fully edited, but we do have text for each genus and keys to the tribes and genera.

During the past few months, we have been determining exactly what is needed to complete the project, and how much it will cost. We are determined that it will be completed before the end of 1999, but this will require some additional funding. We have begun seeking this funding. We are assuming that, should we succeed in doing so, we shall be allowed to see the *Manual* through to completion.

Among the tasks that remain to be completed are a) conversion of all the files to Windows-based programs, b) preparation of the glossary c) development of an integrated index, d) editing of some of the larger manuscripts, and e) completion and printing of the maps. Then all the disparate files have to be integrated into a single product.

The last sentence means that page design has to be completed, a not inconsiderable task. We are convinced that we can raise the needed funds for completing this project and that the resulting product will be an invaluable resource for those working with grasses, not only in the continental United State and Canada but throughout the world.

Please send comments or questions to:

Drs. Mary E. Barkworth and Kathleen M. Capels

Intermountain Herbarium, Department of Biology, Utah State University, Logan,
Utah 84322-5305

Voice 435-797-1584; FAX 435-797-1575; Email: stipoid@cc.usu.edu