

USING COMPUTERS TO CATALOGUE BEEKEEPING LITERATURE

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Beekeeping literature in German Language comprises an enormous quantity of information concerning all areas of theoretical and practical beekeeping, economical aspects of beekeeping, science of the honeybee, and beebreeding. But all this knowledge is widely dispersed, and, as a rule, not easily accessible. Some of it is forgotten, snowed under by the present-day information avalanche. Some of it just goes out of fashion and is destroyed. An ordered collection, made accessible through modern means of documentation, could serve here not only to preserve ancient cultural values, but also to create new ones. This could be of great value not only for beekeepers, but also for the general welfare.

The following consideration constitutes our inspiration and goal: about 120 files with complete and incomplete annual volumes of beekeeping magazines are standing next to over 250 bound annual volumes, as well as uncountable texts and books on beekeeping, beekeeping economy or bee-science, in a private scientific archive.

This archive was brought together by the authors of this article over the years. Meanwhile, the problem of accessibility (the main problem in this "informational era") has received special attention, as present-day computer technology has been implemented as means to provide structure and organization. In this article, we would like to bring forward our initiative, provide some backgrounds of our ways and means, illustrate this with some examples from our data bank. Last but not least, we would like to solicit some support for the continuation of our activities.

We have experienced and ever widening gap in the availability of older magazines or other printed matter on the subject of beekeeping. Libraries in scientific institutes only have more or less complete collections of scientific literature. Beekeeper's know-how or practical skills, that are indispensable for practical beekeeping have traditionally found a place in the regional beekeepers magazines. These are notoriously scarce in these libraries.

While clarifying problems of practical and theoretical problems of beekeeping we often experienced the difficulty of getting the right literature. This often turned out to be an insolvable problem, but always wasted a lot of our time and energy. As it seems that especially regional beekeeping magazines get lost quickly, we have implemented the idea of building a small archive of beekeeping literature. It quickly became obvious, that a lot of (in our eyes) interesting literature is still lying around in files and beekeepers' archives. These issues often damaged by the "tooth of the ages" were often freely put at our disposal for the purpose of archiving. The reason for this was, in most cases, that one did not like the idea, that historical ideas in beekeeping should get lost, and also that of preserving our cultural heritage, especially in the field of beekeeping.

This is certainly asking a lot from any private archive. Nevertheless, we think, that we have come closer to our goal by working hard at it last summer. We used our holiday to archive the precious material that we so far collected, and to document it all a reasonable manner. All issues are now accessible for the interested beekeeping friends. Some are bound into annual volumes, or brought together in files (when annual volumes are incomplete) and can be easily located. Apart from this, a working place was created, where a state-of-the-art computer with printer is available.

The first author (T.S.) is mainly concerned with working out the accessibility of files, including the continuous updating of the lists of complete and incomplete annual volumes. He also takes care of the storage of double issues. Thanks to the help of the computer, the problem of organizing all this "book beeping" has been solved. This also guarantees the possibility to be able to retrieve this or that issue in the already quite large archive. Also it remains easy to find double issues that can be used for exchanging or lending out.

The following lists are kept:

1. Lists of books and non-periodical printed matter, containing bibliographical data and localization in the archive.
2. Lists of missing issues of magazines, which always offer a quick insight into the available and missing issues in our collection.
3. For each magazine, a description of its history (founding year, changes, end of publication, continuation as...)

Figure 1 represents a typical file record for the example of the Westfälische Bienenzeitung.

Westfälische Bienenzeitung

Specialized journal of apiculture – Issue of The Land Association of Beekeepers in Westfalia and Lippe

Fonded in 1888

The publication, with the above title, of "Leipziger Bienenzeitung" founded in 1886, for Westfalia.

Successor of "Vereinsblatt des Westfälisch-Rheinischen Vereines für Bienen- und Seidenzucht", which has been issued since 1850 and which, from 1887 on, when the provinces of Westfalia and Renania had been separated, would remain the journal of the association in Renania and would supply informations for the beekeepers in Westfalia only in 1887, being a transitory solution.

1943 – *suspension, as an independent organ, conditioned by the war* and continuation as "Norddeutsche Bienenzeitung" (together with "Der Niedersächsisische Imker", "Der Imker aus Thüringen", "Sachsen-Anhaltische Bienenzeitung", "Schleswig-Holsteinische Bienenzeitung", "Uns Immmen").

Last issue – in October 1944.

1946-1947 Newsletter of the Land Association.

1948 WBZ is received from Leipzig.

January 1949 until April 1949 – publication of the Association's news in "Rheinische Bienenzeitung".

May 1949 – re-publication as "Westfälische Bienenzeitung", in the beginning, alternatively with the cover "Leipziger Bienenzeitung – West Edition" (the date at which the double issue ceased to appear is not known).

1966 – In the year of issue 79, its publication as an independent organ is definitively stopped (WBZ will be integrated in ADIZ).

The number of issues on the 15th of January 1993:

(Position: WBZxx)

WBZ:

year of issue 62 (1949) numbers: 1,2

year of issue (1950) numbers: 8, 9, 1

year of issue 64 (1951) (unbound)

year of issue 65 (1952) numbers: 1-3, 5-12

years of issue 66-69 (1953 to 1956) (unbound)

year of issue 70 (1957) (bound)

change of size

years of issue 71-79 (1958-1966) (bound)

LEZ – West edition:

years of issue 65-69 (1950-1955) (bound)

(1951 and 1952 are considered as year of issue 66)

year of issue 71 (1957) (bound)

Figure 1 – File page for "Westfälische Bienenzeitung"

The second author is mainly concerned to document single articles in a professional software documentation system, which was adapted especially for this purpose.

The documentation system contains the following text fields:

Author:

In this column the author is stated, or in case of a collective work, the editor. If there is more than one author responsible for a publication, then only the first is stated here; the others are mentioned under the heading of co-authors.

Co-author:

Here the co-editors or authors who were omitted under the previous heading can be stated.

Year:

Year of publication.

Title:

The original title in its original language is stated here.

German title/Original language:

In case the German title is unknown, at least the original language is mentioned here.

Reference to journal of publication:

In case of articles in a magazine this column will contain the title of the magazine, incl. year, publication nr. and page number.

Location/Institution/Series of publications:

In the case of magazine this column remains empty. Otherwise, the edition information is put here. Institutions can be: Universities, high schools, government departments, research centers, etc. Here it can also be stated, if the publication is part of a serial publication.

Type of publication:

If applicable, here it can be mentioned if the publication is a PhD thesis or other special publication.

Size, appendices:

In case of incomplete original editions, we can state here, which parts are available in the archive. Also, illustration and appendices are marked (here).

Location:

The location or the name of the file where the work is kept.

Quality:

A subjective evaluation of the work.

Standard marks: (e.g.) research letter, historical publication on practical beekeeping, government rule or communication.

Abstract:

A short, compressed view of the contents, can contain one's own remarks.

Remarks:

Here you can find some additional information, such as Lecture held...at...

Datum:

Date of entering into data base.

Descriptors:

A group of descriptive words, which enable a systematical search through the data base.

The following two examples should clarify the lay-out and application of documents:

In this documentation system there are several search possibilities, especially string-search for any string, be it a word or a part of a word or a combination of words or characters. This can be done in any text field, so that a search for a specific author, a title, or a descriptor can easily be done. Also the usual logical combinations as "and", "or" or "not" are possible between strings, to give direction to the search.

Author	→	Dreher, K.
Year	→	1963
Title	→	On the Sufficient Supply with Drones of Our Mating Stations
Review	→	Deutsche Bienenwirtschaft, 1963, number 12, pag. 309-312
Annexes	→	4 illustrations
Quality	→	Practical report
Summary	→	On the basis of the admittance of the multiple mating of the queen, one is faced with the problem of the satisfactory supply of the mating stations with drones. An overall regard on the hereditary transmission in the case of the honeybee
Observations	→	Report at the Beekeepers Conference, organized by the DIB (German Beekeepers' Federation) in Hann – München
Key words	→	Mating station/Selection Selection Genetics
Registration	→	27.06.1992
Position	→	File: Change of Mass

Fig. 2 – Identification by means of the chain "Dreher K." and "1963"

Author	→	Ledwa, Wolfgang
Year	→	1992
Title	→	On the Population Behaviour of the Bee
Review	→	Bienenwelt 34, 1992, number 10, pg. 236-237
Type of publication	→	Excerpt
Volume, annexes	→	3 pages
Quality	→	Speculative opinion on a theme; the reflection is considered as important!
Summary	→	The presentation of Ledwa's conception on the development of the bees population, on the basis of the bee fluctuation, conditioned by instinct
Observations	→	Excerpt enclosed in the author's letter from february 13, 1992. Superficial report in: Deutsches Bienen Journal 1, 1993, number 1, pg. 34
Key words	→	Population pattern/Mathematics Fluctuation/Colony strength
Date	→	23.02.1992
Position	→	File: Way of Maintenance (ecerpt) BW92 (original report)

Fig. 3 – Identification by means of the keyword: "fluctuations" (a secondary notion of the keyword: "colony strength") and "mathematics"

The documentation system comprises, at present over 9000 documents (as shown in the examples), and occupies about 8.5 Megabyte hard disk space. Of course, we have not yet put all articles in the older beekeeping literature into the data base. This is a work, that is going to take considerable time and effort, and we were recently able to enlarge the size of our archive considerably. In July 1993, the archive comprised in total 364 annual volumes (and an uncounted number of incomplete annual volumes) of beekeeping magazines in the German language, consisting of 52 magazine titles, that partially merged with one another in time (see example in figure 1). Most of this material dates since after 1945, but there are also available several complete volumes of pre-war magazines. Single issues and incomplete annual volumes are housed today in more than 120 files. The oldest issue of a magazine goes back to 1912 (Pfälzische Bienenzeitung 53, 1912, nr. 10), and has been reduced to a pitiful state by mice. The oldest book in our collection was published in 1861/62 (Schmid, Kleine, Die Bienenzeitung oder die Dzierzon'sche Theorie und Praxis, C.H. Beck'sche Buchhandlung Nördlingen 1861/62), and is in a very good condition.

As we have acquired most of our material in an accidental manner, it is easy to understand, why the archive cannot be complete in all annual volumes, and why whole volumes of several magazines are missing. Moreover, as the archive grows, we keep discovering new titles, that are still missing in our collection. Even if it becomes certain that a really complete archive will never be achieved, we still keep on spending our energy to close the existing gaps in the collection. Meanwhile, we try to keep an open mind for the problems encountered. To give one example: The Südwestdeutsche Bienenzeitung (a different publication from the Magazine of 1949, the Südwestdeutsche Imker) appeared as war-time publication since April 1943, by merging together the following magazines: Die Biene und ihre Zucht, Die Bienenpflege, Die hessische Biene, Rheinische Bienenzeitung. The annual volume of 1943 is available, as are numbers 1, 2, and 3 of 1944. So far, we cannot judge from our data, until which date precisely the magazine was published.

Elsewhere, we found indications, that the war-time edition "Nordwestdeutsche Bienenzeitung" had to stop publication in November 1944 for lack of paper. Maybe one of our readers is able to give us an exact indication about this, or maybe even send us the last issues of 1944, from the last days of the Südwestdeutsche Bienenzeitung. This would certainly mean that we could close the book on the Südwestdeutsche Bienenzeitung and the merged regional magazines.

The fact that this project of a private archive of literature of beekeeping science is not just a "may fly", is expressed by the activities described. These often ask too much from the authors. As the first author is still very young, we hope that this project will bridge the gap between generations. Also, we take pride in the fact that we were able to do all this for the beekeeping world without any governmental subsidies. The archive, including the infrastructure described; is accessible for all beekeepers. Anyone interested is invited to work by appointment in the archive, and to have hands-on access to the available computer facilities. Thus, the product of many years of beekeeping literature can be made useful for your own work.

Moreover, we would like to thank all those who sustained us in our self-defined task. By thanking one person, we would like to thank all the others: We remember here the large number of issues of beekeeping magazines that was unselfishly sent over to the archive by Mr. Simon Stoltz, the editor of the Austrian magazine "Bienenwelt". We are again and again surprised by the goodwill we experienced. We were always treated in a most friendly manner, when we came to collect material. A lot of instructive conversations on beekeeping and contacts enrich the seemingly "dry" work at the archive. The countless personal contacts are of enormous value and, especially, a reason to get on with the work.