

THE ECO COLLECTION DATABASE

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ABSTRACT

The Eco Collection Database consists of the Takagi Family Documents and the Ito Keisuke Collection. The information resources in connection with education and research activities are utilized, and the system which carries out information dissemination with the sophisticated metadata. "Takagi Family Documents" are known as of the Kiso 3 river valley river improvement historical records, such as "Houreki river improvement". "Ito Keisuke Collection" is famous for their many color sheets of animals, plants, fish and minerals in the 19th Century. After performing the metadata grant to this data, and digital archiving, public presentation is planned as an interactive collaborative system. This database is very useful and of big modern value, not only to the research for make better societies which are environment-friendly, but also to the educational field including lifelong learning. We make effort to digitalize the research results made in the university, materials related to nature disasters like typhoon and earthquakes. We hope that we can make this Eco Collection Database beyond the times, cooperating with other related organizations in Tokai area.

INTRODUCTION

The Eco Collection Database mainly consists of the Takagi Family Documents and the Ito Keisuke Collection. Today, it is important to see human living close together with nature in a new light. The Eco collection is very useful and of big modern value, not only to the research for making better societies which are environment-friendly, but also to the educational field including lifelong learning. Nagoya University Library has a plan to making effort to digitalize the research results made at the university, materials related to nature disasters like typhoon and earthquakes. We hope that we can make Eco Collection Database beyond the times, cooperating with other related organizations in Tokai area.

TAKAGI FAMILY DOCUMENTS

Takagi Family Documents are the largest scale systematic materials about peoples, rivers and flood control in Edo period, from 17th century to 19th century. These documents tell us the histories between nature and human beings realistically. The documents consist of over 100,000 documents. The Takagi Family performed the Kiso 3 rivers management during Edo period. They left a lot of documents and pictures¹.

The features of documents are below:

(1) Systematic river improvement archives

This documents group begins "Houreki river improvement (1754-55)", and is known as the so-called treasury of the Kiso 3 Rivers improvement historical records.

FIGURE 1 is one of the pictorial maps. It shows the points for which construction were difficult in Houreki river improvement.

(2) Details of territory administration

Since there were several thousands residents, administration government was performed finely.

Example: Sumi-iro-shirabe (1860) The following was said as customs of those days.

People Writing is a picture showing their heart. The idea about "character" is used for its politics.

(3) Many home economics documents

A life of those days and the special feature of power rise from many documents of a financial relation, the headship of the family, a diary, ceremonies, etc. There were many women's letters left behind.

(4) Many modern documents

The Takagi family also survived the Meiji era as a member of the House of Representatives. How did the direct vassal of a shogun overcome the Meiji Restoration? And the actual condition of Meiji modern local government etc. Ssdamasa Takagi (1851-1920)

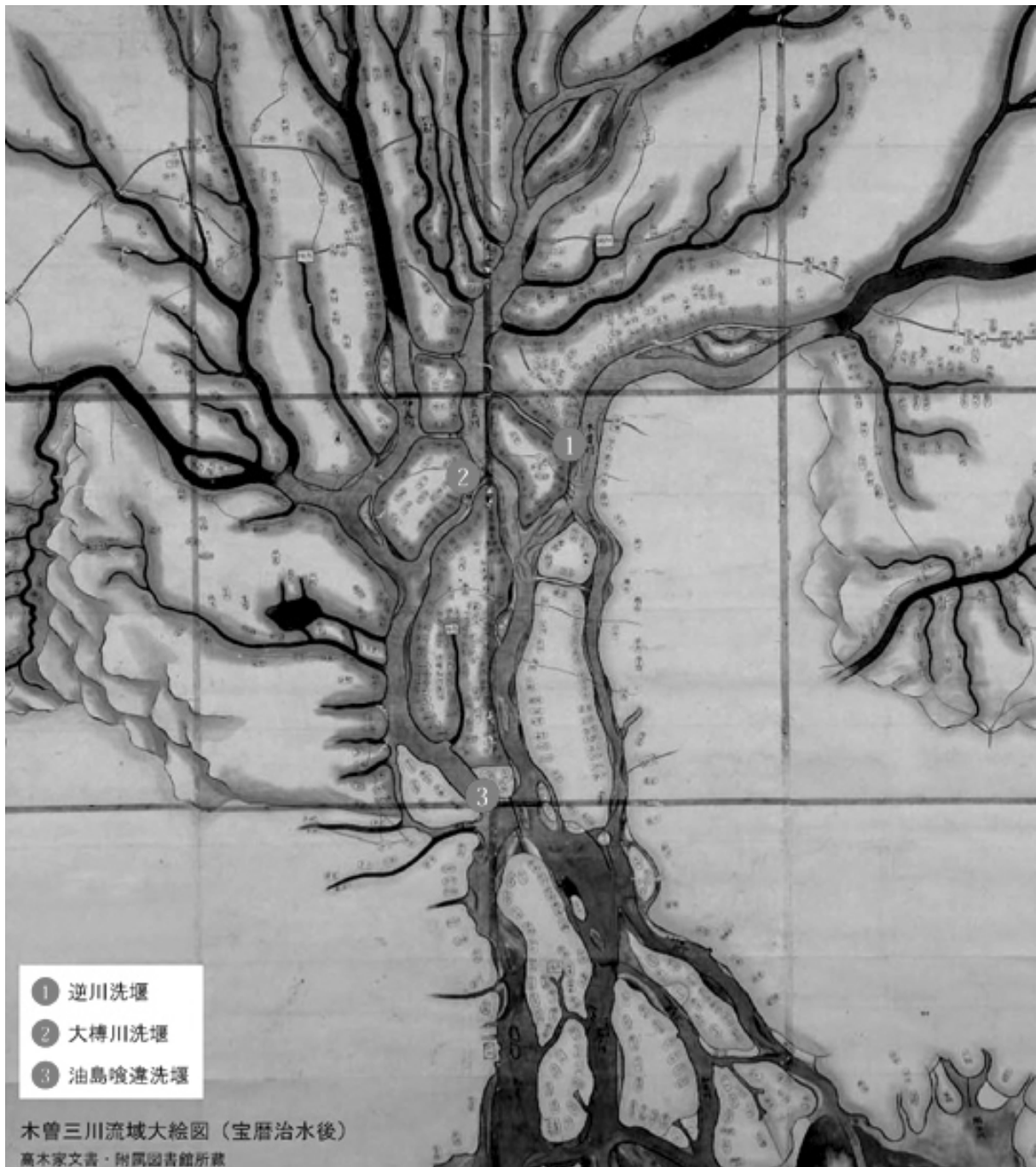


FIGURE 1 One of the pictorial maps of the Kiso 3 Rivers (19th century)

ITO KEISUKE COLLECTION

Ito Keisuke Collection is the manuscripts about animals and plants collected by Ito Keisuke who are the pioneer of modern botany in Japan.

Ito Keisuke(1803-1901) was a leading naturalist from the last days of the Tokugawa shogunate to Meiji era. Keisuke had very wide knowledge in natural objects like animals and minerals. Especially he put his heart into botany. *Kinka Shokubutsu Zusetsu* shows us his endless interest for plants and zeal for studying. Keisuke's life was very long and energetic in those days and his achievements had a role to introduce the way of scientific thinking through western natural history, botany and Dutch studies from early-modern times to recent times. Keisuke's great history starts from studying under Siebold and that is the most important event for his life.



FIGURE 2 Ito Keisuke

Keisuke started learning medicine from 1810 and in 1820 Keisuke practiced as a town-doctor. he got more curious about Western medicine. In 1826, Keisuke met Siebold at Atsuta and Keisuke became his pupil in the next year. When he went back home from Nagasaki, he was given a book by Siebold. It is *Flora Japonica* written by Thunberg. It's said that Keisuke loved this book and always carried with him. Keisuke could publish *Taiseihonzomeiso* in 1829.



FIGURE 3 *Taiseihonzomeiso*

What's *Kinka Shokubutsu Zusetsu*?

Kinka Shokubutsu Zusetsu is a book about trees and plants, on which Keisuke mentioned many and inserted collected materials. It's said the book was made when he was in the low ninety, from 1893 to 1897. He tried to leave his knowledge of plants he had studied in his life as much as possible. Although it seems that he wanted to make it public some day, but until then it was a secret book which had never loaned out. After all, this book has never been published for a long time, from his lifetime to now.

It seems that *Kinka Shokubutsu Zusetsu* consists of one hundred and sixty-four in all. Nagoya University library has one hundred and forty-four. Most of the others are in the Ueno branch of the National Diet Library. There are some characteristics in *Kinka Shokubutsu Zusetsu*. We can imagine how strong and deep his zeal and knowledge are from them.

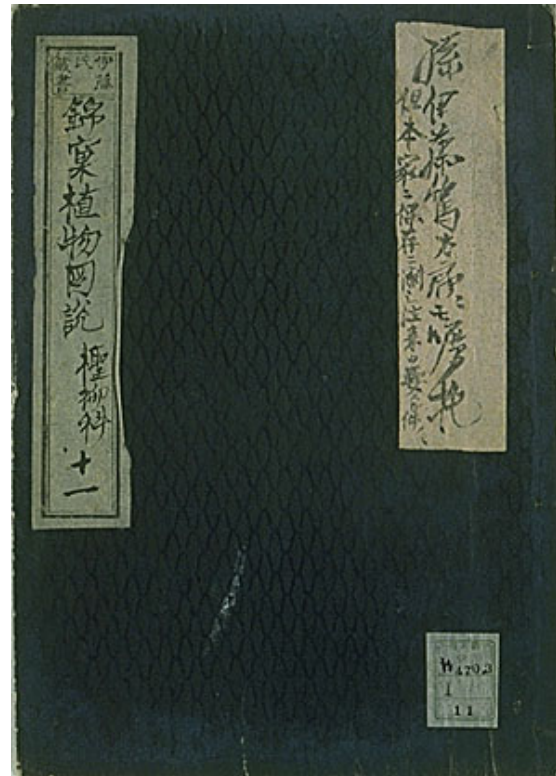


FIGURE 4 *Kinka Shokubutsu Zusetsu*

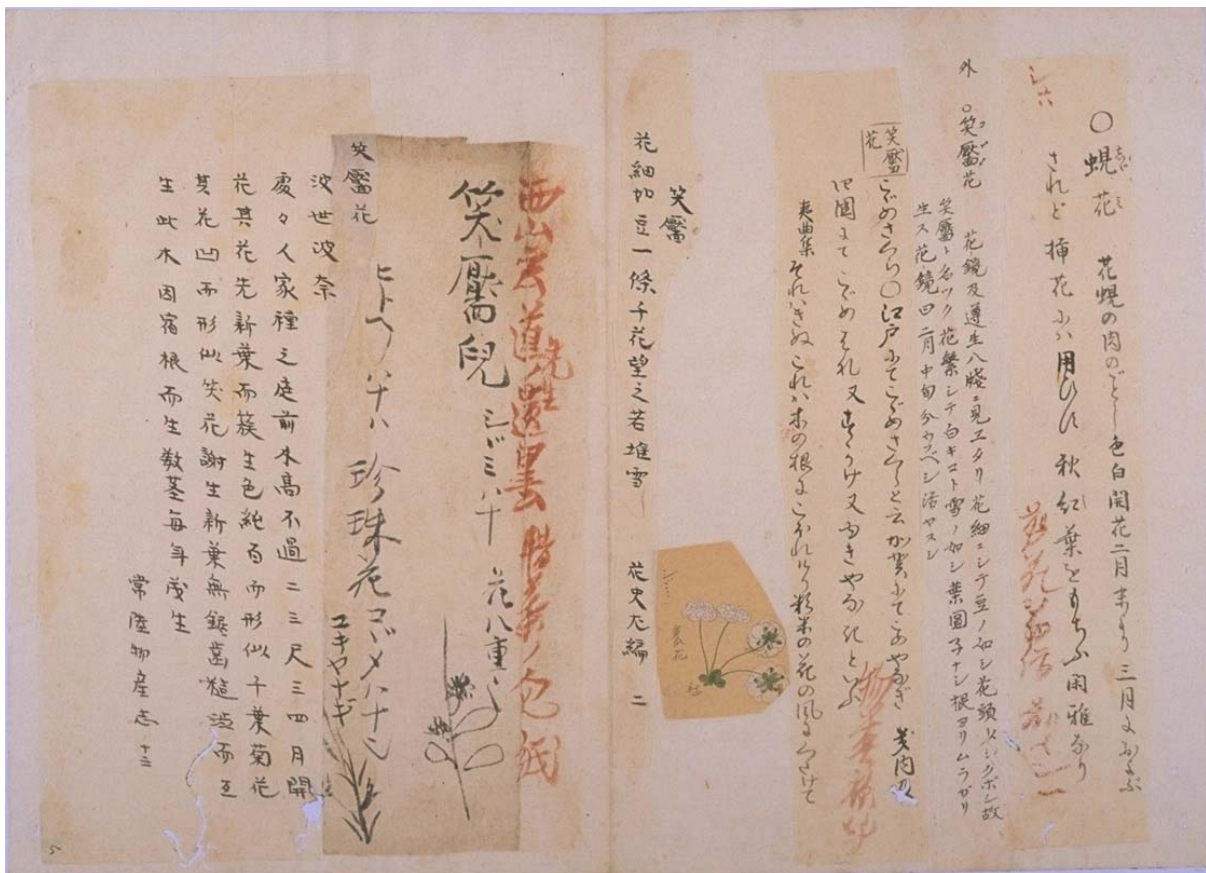


FIGURE 5 Sample page of *Kinka Shokubutsu Zusetsu*

(1) Keisuke often used iroha order (traditional Japanese alphabetical order) for plants in his books. However, as to *Kinka Shokubutsu Zusetsu*, he used the western way, that is, he classified plants into “Family” and arranged the order by natural system used in those days. Keisuke made his grandson Tokutaro go to Cambridge University in the United Kingdom at his own money. He tried to get very new information about plant taxonomy from Tokutaro. As a result, the tables of contents in *Kinka Shokubutsu Zusetsu* are almost same order as the one Bentham and Hooker published in the latter half of the nineteenth century. While writing books for plants in iroha order, he also wrote the illustrated book based on western classifying systems. He, maybe, had an ambition to harmonize Japanese botany with the western science.

(2) How big his desires are to use even the label of a peach can

Keisuke attached a lot of materials, which he collected to study plants, to *Kinka Shokubutsu Zusetsu*. Some are the copies of pictures and literature by ancestors. The others are the familiar things like clippings of ads. For example, on the chapter of “tea”, more than twenty papers including price lists and sales papers are attached. On the chapter of “peaches”, even the label of an imported peach can is attached. Anything was special for him, if it was related with plants. He had an endless spirit of inquiry for plants.

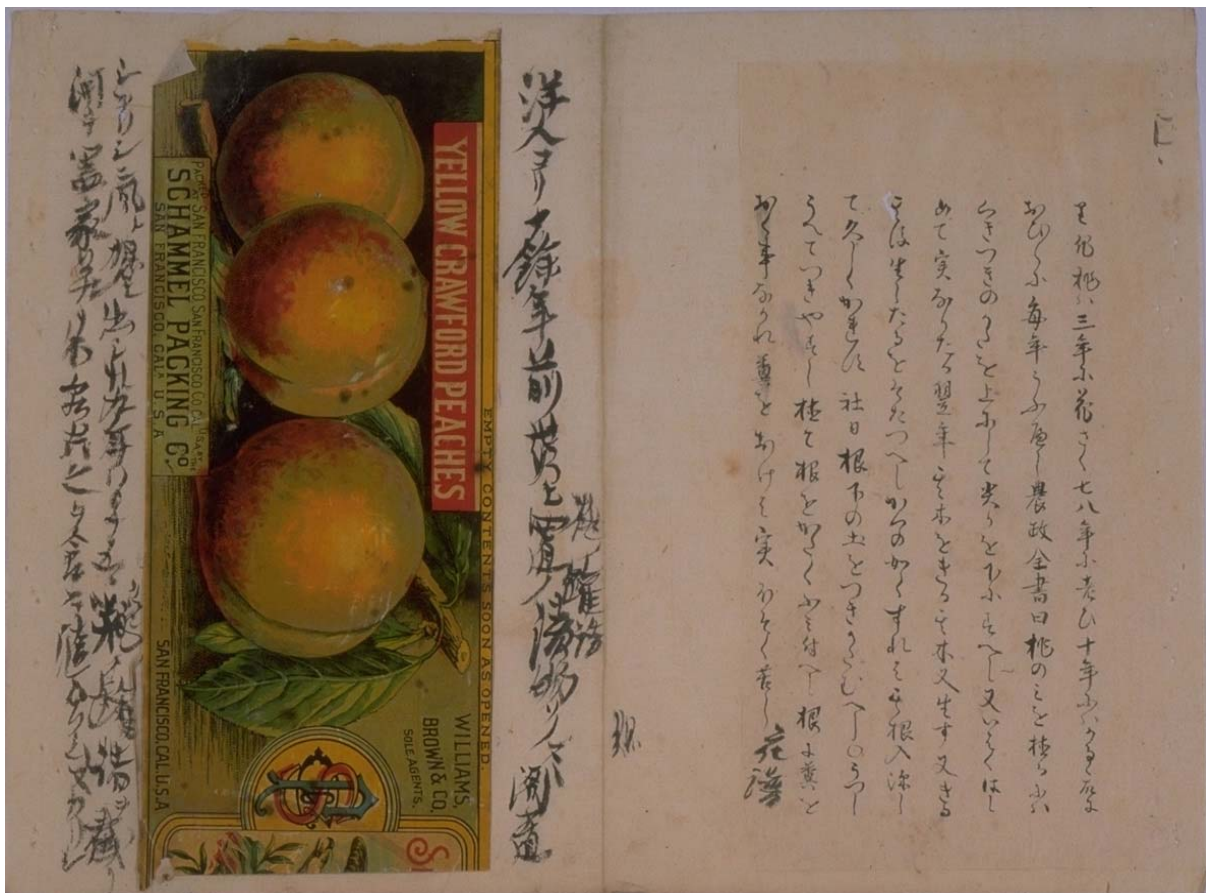


FIGURE 6 Peaches

(3) Interest for plants in remote regions

It's said Keisuke was very interested in the plants in remote regions like Hokkaido, Okinawa and Ogasawara. At the last days of Tokugawa Shogunate, he worked for the Bansho Shirabesho, the office to study foreign language and science, as the researcher of products like plants, animals and minerals. Keisuke's interest for the unknown plants broadened to the world. He has held exhibitions with the fellows in Shouhyakusha, the study group of botany in Owari, since 1827. Sometimes specimens of plants in India and Malay have been displayed there. Those specimens were given from Siebold. Young Keisuke, maybe around 30 years old, must have been pushed to the foreign plants world.

THE DESIGN OF SYSTEM OF THE ECO COLLECTION DATABASE

The Eco Collection Database has Title, creator etc. It designed according to Dublin Core²⁾ format to each document (FIGURE 6). While performing the metadata grant to this document, the system of digital archiving and

interoperating collaboration systems are prepared.

No.1 (全ヒット件数:1件)

[一覧へ戻る]

コンテンツ表示

Item	Contents
タイトル	木曾三川流域大絵図
サムネイル	
作者・著者	不詳
主題・キーワード	日本近世、古絵図、木曾三川、治水、輪中
内容記述	この絵図は、江戸時代を通じて木曾三川流域の治水を管掌した旗本高木家が用いたものである。当該水系では、養老断層に沿って沈み込む東高西低の土地傾斜を反映して、木曾川、長良川、揖斐川の順に河床が低くなっており、下流では水脈が網の目状に結合し、これが連年の洪水被害をもたらす大きな要因となっていた。こうした厳しい環境のもと、人々は堤を築いて大規模な輪中を発達させるとともに、根本的解決として、宝暦治水に代表される三川の分離に向かうのである。高木家文書中には、流域住民による工事願書などが数多く残されており、流域治水の困難性と、それに挑んだ苦闘の歴史を伝えている。
出版者	旗本交代寄合高木家
関与者	なし
日付	1730年代(推定)
資源タイプ	なし
資源識別子	(高木家文書)6271
情報資源	肉筆彩色絵図
言語	JPN
関連	なし
関与者	美濃・尾張・伊勢(木曾三川流域、緯度経度不明) 江戸時代(1730年頃) 旗本高木家
権利管理	名古屋大学附属図書館所蔵

FIGURE 7 The registration screen of the system which described by Dublin Core

EXPANSION OF THE ECO COLLECTION DATABASE

At 1998, The digital library of Nagoya University Library was build. The Grants-in-Aid for Scientific Research of the Ministry of Education were used. From 2002, Takagi Family Documents Database was open to publish. We improved the Database, at 2003, Takagi Family Documents Digital Library started. At 2005 Eco Collection Base renewal.



The screenshot shows the top page of the ECO COLLECTION website. On the left, there is a green forest background with the text 'エココレクション' (Eco Collection) and '環境共生' (Environmental Symbiosis). Below this, a text box explains the purpose of the collection: 'エココレクションは、環境共生を築くための研究への応用や生涯学習での利用を考えたデータベースです。環境共生とは、人類も含めたあらゆる環境との調和を目指し、他の生き物と共に生きていける環境を創造することです。' (Eco Collection is a database designed for application in research for building environmental symbiosis and for use in lifelong learning. Environmental symbiosis is about achieving harmony with all environments, including humans, and creating an environment where we can live together with other living things.)

On the right side, there is a 'チャンネル' (Channel) section with three items:

- 高木家文書** (Takagi Family Documents): 国内最大級の系統的河川治水資料であり、自然と人間の関係史をリアルに伝える (The largest domestic systematic river water management materials, and conveys the relationship between nature and humans in real time.)
- 伊藤圭介文庫** (Ito Keisuke Library): 日本における近代植物学の祖とされる伊藤圭介の稿本を集めた文庫 (A library of manuscripts of Ito Keisuke, the ancestor of modern botany in Japan.)
- 自然災害史** (Natural Disaster History): 近日公開予定 (To be published soon.)

At the bottom right, there is a search bar with the text '簡易検索' (Simple Search) and buttons for '高木家文書 検索' (Takagi Family Documents Search) and '伊藤圭介文庫 検索' (Ito Keisuke Library Search).

FIGURE 8 Top page of ECO COLLECTION

DISCUSSIONS

There is a gap between what Database of Library offer and the Users expect to these Database. They have a lot of problems on the whole like the weakness of the budget and coordination. They also have problems in the network, copyright, contents, the cooperation with community and how to get well with the internationalized world. It is desirable that enhanced metadata, improvement of the way of searching and viewer should be shared and standardized.

This database is very useful and of big modern value, not only to the research for make better societies which are environment-friendly, but also to the educational field including lifelong learning. It has historical value which is as information world, nature, history, culture, technology and folk customs became entangled. Also it reflects reconsideration of "the related history of nature and human being". These documents share a lot of facets of information resources. It was based not only between different fields but also local information.

We make effort to digitalize the research results made in the university, materials related to nature disasters like typhoon and earthquakes. We hope that we can make this Eco Collection Database beyond the times, cooperating with other related organizations in Tokai area.

REFERENCES

- 1) Hiroshi Itsumura, Masanori Akiyama. The design plan for the Nagoya University information collaboration system. PNC Annual Conference and Joint Meetings 2002 PNC/ECAI/IPSJ-SIGCH/EBT. IIPJS symposium series vol.2002, no.13. p.43-46.
- 2) Dublin Core Metadata Initiative. "Dublin Core projects." <<http://www.dublincore.org/projects>> (last access 6/30/2005)