# 和歌山県貝類研究史

#### 1. 古来より江戸時代における貝の研究

本県の貝について古くは記紀や万葉集に断片的に紹介されているが本格的に研究紹介がなされたのは近世徳川末期18世紀に至ってである。有名な本草家、好貝家達の著者の中に登場するものに次の様なものがある。

大 江 流 芳 1751(寛延4年) 貝尽浦の錦 平 智 源 内 1762(宝暦12年) 紀伊物産誌 1802 木 村 蒹葭堂 (享和2年) 奇貝図譜 田辺町奉行 1814 (文化11年) 紀州田辺介品書上目録 小 原 桃 洞 1830~43(天保年間) 南海貝譜 畔 田 伴 存 1830~43 (天保年間) 介志10冊 1843 (天保14年) 古名録80巻 1849 (嘉永2年) 写真介録

#### 2. 科学研究を目的とした外人の来訪

貝類学者であり船医であった Arther Adams (1820~1878) が英国水路測量艦 Acteon 号に乗り込み日本近海に航海の際、文久元年(1861)大島、田辺、由良に寄港して陸産及び海産の貝を採集し報告しているがこれは外国人の手による初めての記録である。次いで水路測量艦 Sylvia 号の船長 H.C. St John によるドレッヂ採集 (1871~72) があり、E. A. Smith (1875) によって報告されている。又 Dunker の「日本海産貝類図譜」(1882)の中にヤカタガイ (Hydatina inflata) の報告があり和歌山の名が見える。

#### 3. 平瀬介館の活動

我が国貝類研究の草分けである平瀬介館々主・平瀬与一郎(1859~1925)の貝類研究の進展に伴い田辺在住の矢野平次(歯科医)八百長平,那須安太郎(金融業)森宇平(理髪業)等の協力によって海産貝類を得た他 介館所属の助手・中田次平,東永吉,森崎周市を東牟婁,西牟婁の奥地深く陸貝採集のため派遣し多くの種類を明らかにした.

## 4. 近年の研究

大正11年 (1922) 7月 京都(帝国)大学附属臨海研究所が白浜(当時 瀬戸鉛山村)に設立され、海洋生物研究が大いに推進されるに伴い貝類専攻者が職員として着任. 本県の貝類研究は大いに進展をみた. 昭和4年6月天皇の行幸があり田辺湾及び串本で生物採集が行われた. この時天覧に供した貝類標本提供者に次の人々がある.

那須米二郎(和歌山市),神田耕一郎(白浜),木下清一郎(田辺),森島千景(串本)

行幸を機に県産貝類総目録の企てがあり、その編纂を黒田徳米、瀧巌両氏に委嘱された.

## 5. 県内研究者の活動

那須米二郎 (1869~1945)

和歌山市在住,和歌山師範卒後小学校に奉職する傍ら主として和歌山市を中心として貝類採集につとめた.水軒浜,雑賀崎,加太方面に亘る海域一帯,和歌山城内の陸貝類を調査した.又小原桃洞完成の貝の墨絵を写本し実物によって彩色し昭和4年1月に完成した.

神田耕一郎 (1873~1961)

日高郡白崎村(現在の由良町)村長、セメント会社を経営する傍ら水産関係の事にくわしく由良湾、湯浅湾を中心に海産貝類を数多く採集 又同地の石灰岩地帯の陸貝研究にも熱心であった。カンダイボシャジク (Pilsbryspira kandai)、カンダニシキニナ (Latirus kandai) は氏に献名された貝である。

坂口総一郎 (1887~1965)

海草郡岡崎村出身(現在の和歌山市),沖縄師範から和歌山師範に奉職,海洋生物全般に くわしく献名された貝としてクリイロカリバガサ (Calyptraea sakaguchii),ワカウラツボ (Fairbankia sakaguchii) がある.

岡本 清 (1902~1949)

県立日高中学校(現在の日高高等学校)教諭、昭和4年天皇行幸に先立ち奉迎委員として天覧貝類標本の調製準備を進める為、黒田徳米先生の指導を受ける事となり爾来和歌山県下の貝類調査に没頭、主として日高郡内の海岸特に名田、塩屋、三尾を意欲的に廻りヒザラガイ類 (Polyplacophora)、ウミウシ類 (Opisthobranchis) 等も採集された. 多数の同僚や後進の指導に当り大いに斯界に貢献された. オカモトイモ (Rhizoconus fumigatus)、オカモトウズ (Astralium okamotoi) 等新種及び多数の新記録加入種を発見された.

伊藤 恒堂 (1905~1961)

串本町出身,本名,前登喜夫は昭和13年紀州貝類同好会を創立し"紀州貝類"発刊したが昭和15年第2巻第2号で廃刊となった。戦後意欲的に名田方面の貝類採集を始め、又、クロズギセル(Mundiphaedusa kurozuensis)の再発見に努め、数々の新種も発見した。

久世 義次 (1907~1970)

有田市金屋町出身, 1930 (昭和5年) 辰ケ浜近海産貝類目録出版 (謄写版), 主として 有田郡辰ケ浜の貝を調べた。

木下清一郎 (1907~1969)

昭和9年4月白浜に白浜介館を設立,千島から台湾に至る標本を展示,中でも奇形異形の貝に注意を払い一般観光客への啓蒙はもとより専門学者との交流も多かった。キノシタカセン ( $Tolema\ kinoshitai$ )、キノシタバイ ( $Parancistrolepis\ kinoshitai$ )、ミノタイラギ

(Atrina kinoshitai) などの新種を初め、英国人学者 Fulton により記載された新種も数多くある.

戦後、国鉄紀勢線の延長、国道42号線の整備によって交通の便が良くなるに伴い未調査 地域への開拓が進む一方、漁法の技術革新によって新種や県産未記録種が黒田徳米、波部 忠重両博士及びその指導下にある新人達によって続々と発見されるようになり、また生態 的な新知見も発表されるようになって貝類研究熱はいやが上にも高まり、本県の貝類相が 一段と明確にされつつある事は誠に喜ばしい事である. (山本 虎夫)

## A History of Conchological Studies in Wakayama Prefecture

1. Research from Ancient Times through the Edo Period.

The earliest remarks concerning the shells from the region of Wakayama Prefecture appear in the Kojiki (Record of Ancient Matters) and the Nihonshoki (Chronicles of Japan) which date from the eighth century A.D. as well as in the Man'yōshū (a collection of over four thousand poems) from the latter half of the same century. However, actual research does not appear in historical records until the end of the Tokugawa Era, in other words, the latter part of the eighteenth century. Some of the more famous naturalists and conchologists include—

- Ōe, Ryuhō (1751) (Fourth year of Kan'ei\*): "Kaizukushi Ura no Nishiki" (Colorful shells on beach),
- Hiraga, Genn'ai (1762) (Twelfth year of Hōreki): "Kii Bussan-shi" (Products of the Province of Kii),
- Kimura, Kenkado (1802) (Second year of Kyowa): "Kigai Zufu" (Illustrations of strange shells),
- Town magistrate of Tanabe ed. (1814) (Eleventh year of Bunka): "Kishu Tanabe Kai-shina Kakiage Mokuroku" (List of shells occurring in the region of Tanabe, Province of Kii),
- Ohara, Tōdō (1830–1843) (During the Tempo reign): "Nankai Kaifu" (Catalogue of shells from the southern waters),
- Kuroda, Banson (1830-1843) (During the Tempo reign): 10 volumes of "Kai Shi" (Conchological notes),
- Kuroda, Banson (1843) (Fourteenth year of Tempo): 80 volumes of "Komeiroku" (Glossary of ancient names),
- Kuroda, Banson (1849) (Second year of Ka-ei): "Shashin Kairoku" (Real illustrations of shells).
- 2. Research Conducted by Scientists from Abroad

Arthur Adams (1820-1878) of H.M.S. the Acteon, a conchologist and then the

<sup>\*</sup> Name of era

doctor of the ship, arrived in Japan in 1861 (First year of Bunkyū) during the hydrographical surveys by his ship and made some collection of the marine and terrestiral shells at Öshima, Tanabe and Yura when his ship was anchored there and later he reported on those. This is the first record of Japanese shells made by foreign specialists. The next collection work was conducted by dredging in 1871–1872 by H. C. St. John, the captain of the hydrographical ship, H.M.S. the Sylvia, and the report on this material was published in 1875 by E. A. Smith. Furthermore, in the work of Dunker, "Index Molluscorum Maris Japonici" published in 1882, Wakayama is recorded as the locality of *Hydatina inflata* (*yakatagai* in Japanese).

#### 3. The Activities of the Hirase Shell Museum

The director of the Hirase Shell Museum, Yoichirō Hirase (1859–1925) is considered as the pioneer of modern conchological researches in Japan. Together with the assistance of Heiji Yano (a dentist), Chōhei Yao, Yasutarō Nasu, (a moneylender) and Uhei Mori, (a barber), among others living in Tanabe, the museum was able to obtain many marine shells and its research work made rapid strides. Assistants to the museum, Jihei Nakata, Eikichi Azuma, and Shuichi Morisaki, traveled around East and West Muro Counties and collected the many terrestrial specimens for the museum.

#### 4. Recent Research

In August 1922 (Eleventh year of Taishō), a marine biological station was founded by Kyoto Imperial University in the present day Shirahama (at that time known as Seto Kanayama). Many researchers joined the faculty of this facility, and researches into the life of the marine species of that area made a great progress in the studies of marine shells of Wakayama Prefecture. In June, 1929, His Majesty, the present Emperor paid a visit to the Laboratory, and collected many specimens from Tanabe Bay and the Kushimoto district. The following people displayed their specimens for His Majesty, the Emperor: Yonejirō Nasu (Wakayama City), Kōichirō Kanda (Shirasaki), Seiichirō Kinoshita (Tanabe), and Chikage Morishima (Kushimoto). To honor the occasion of the imperial visit, Tokubei Kuroda and Iwao Taki were entrusted with the task of compiling a general catalogue of the shells of Wakayama Prefecture, as mentioned in detail in the preface of this book given by Taki.

## 5. The Activities of Researchers in Wakayama Prefecture

Nasu, Yonejirō (1869-1945)—A resident of Wakayama City, Yonejirō Nasu graduated from Wakayama Normal School and was employed as an elementary school teacher. At the same time, he was engaged in collecting marine shells along the coast from Kada to Suikenhama and down to Saikazaki, and terrestrial shells from within the castle grounds in Wakayama City itself. Furthermore, he copied the ink drawing of shells of Tōdō Ohara, colored them as real specimens and in January

1929, a manuscript was published.

Kanda, Kōichirō (1873–1961)—Kōichirō Kanda served as the headman of Shira saki village, (Yura Town at present) in Hidaka County, while pursuing his real occupation as the president of a cement company. A person very knowledgeable about the marine products of the area, Kanda collected many marine shells from the bays of Yura and Yuasa, and was very active too in research efforts to study the terrestrial shells of the limestone zone around the bays. The species, *Pilsbryspira kandai* (Jap. name: *Kandaiboshajiku*) and *Latirus kandai* (J.n.: *Kandanishikinina*) were named after him to honor his contributions to conchology.

Sakaguchi, Sōichirō (1887–1965)—Sōichirō Sakaguchi was born in Okazaki town, Kaisō County (Presently within the limits of Wakayama City) and was employed first at Okinawa Normal School and later Wakayama Normal School. For his contributions to marine biology, *Calyptraea sakaguchii* (J.n.: *Kuriiro-karibagasa*) and *Fairbankia sakaguchii* (J.n.: *Wakauratsubo*) were named after him.

Okamoto, Kiyoshi (1902–1949)—Kiyoshi Okamoto was employed as a teacher at Hidaka Prefectural Middle School (Presently, Hidaka High School). In 1929, in anticipation of the imperial visit, he participated in the preparation of specimens to be displayed under the direction of Tokubei Kuroda. For this purpose, and thereafter, he was engaged in the collection of molluses throughout the prefecture, with special emphasis on the coast of Hidaka County, including Nada, Shioya and Mio. His interests were extended even to Polyplacophora (J.n.: Hizaragai) and Opisthobranchs (J.n.: umiushi). His work greatly influenced that of the circle of his colleagues and students. As a specialist, Okamoto was responsible for the discovery of many new species including *Rhizoconus fumigatus* (J.n.: *Okamotoimo*) and *Astralium okamotoi* (J.n.: *Okamotouzu*).

Itō, Kodō (1905–1961)—Kodō Itō was born in Kushimoto with the former name Tokio Maé. In 1938, he organized the Kishu Conchological Society which published a journal entitled "Molluscs of Kishu" but was discontinued in 1940 with the publication of number 2, volume 2. After the end of World War II, Itō was active in research into the shells of Nada and its environs with the result of rediscovering *Mundiphaedusa kurozuensis* (J.n.: *Kurozugiseru*) in addition to finding of many new species.

Kuse, Yoshitsugu (1907–1970)—Born in Kanaya, Arita City, Yoshitsugu Kuse was active in investigations into the shell fauna mainly of Tatsugahama, Arida County and published a mimeographed list "A Catalogue of the shells of the Tatsugahama Region" in 1930.

Kinoshita, Seiichirō (1907–1969)—In April, 1934, Seiichirō Kinoshita founded the Shirahama Shell Museum, which displayed shell specimens ranging from Chishima

(Kurile Islands) to as far as Taiwan (Formosa). Kinoshita called attention to the existence of abnormal and heteromorphous specimens in many species. Not only interested in elicitation of public interest in conchology, but also he was an active participant in research and other specialist groups. His discovery of new species includes *Tolema kinoshitai* (J.n.: *Kinoshitakasen*), *Parancistrolepis kinoshitai* (J.n.: *Kinoshitabai*) and *Atrina kinoshitai* (J.n.: *Minotairagi*) in addition to those that were described by Fulton, an English conchologist.

With the extension of the Kisei Line of the Japan National Railways, and the modernization of the Route 42, after the war, transportation in the Province of Kii was greatly improved. Regions which previously had been largely inaccessible were opened, and modern fishing methods enabled many new finds. These new discoveries have accelerated the researches of shells of Wakayama Prefecture by Tokubei Kuroda, Tadashige Habe and their descendants. Further, rich finds have been made also in the ecological studies of shells. All these increased the fever of the researchers and gradually clarified the molluscan fauna of Wakayama Prefecture, this is a source of continuing gratification to workers in this field.

(Torao Yamamoto)