Odonatologica 13 (2): 215-232 *June 1, 1984*

SYOZIRO ASAHINA: AN AUTOBIOGRAPHY

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Received December 12, 1983

Editorial Note: — With some delay, the International Odonatological Society celebrates the 70th birthday of its Charter Member, Member of Honour, its immediate Past President, doyen of Japanese odonatology, and teacher of most of the present Far Eastern dragonfly workers. The Editors of this journal are particularly happy that Dr Asahina complied with their request to prepare himself a brief biographic account of his manyfold odonatological and other activities.

INTRODUCTORY REMARK

The "intelligence service" of the international odonatological community discovered that I have passed a milestone in my life, and surprised me by some festivities at the Banquet of the Seventh International Symposium of Odonatology, Calgary, Canada, August, 1983. Both our Executive Editor and the SIO National Office in Japan repeatedly urged me to write up the "dragonfly story" of my life. With some hesitation, therefore, I now present the following notes to my colleagues.

The bibliographic references in the text refer to the Bibliography, published by INOUE & EDA on the foregoing pages of the present issue.

BOYHOOD AND EARLY YEARS

I was born in Tokyo on June 10, 1913. In 1919 my family moved to a newly built house in Takadanobaba where I lived ever since for more than sixty years. At that time there were still some rural fields around our home, so that butterflies and other insects came to the flowers and vegetables planted in our garden. My father[1] taught my younger brother[2] and me how to collect insects. During my elementary-school days, until I was 13 years old, we were often allowed to join the

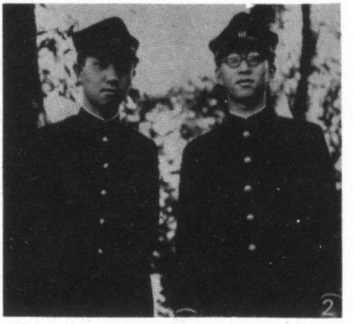
botanical excursions led by my father.

In 1926 I entered one of the middle-schools (junior highschools) of Tokyo, and soon I joined the newly started Field Meeting Group of the Tokyo Entomological Society. On June 10, 1928, our group visited the Sekido--Renkoji area, about 30 km W of Tokyo, where there was a pleasant rich habitat, holding many lentic and lotic dragonfly species. I was very much fascinated by these insects, and for me the highlight of that day was the capture of the petalurid *Tanypteryx pryeri.*

During my middle-school days, up to 1931, next to dragonflies I collected also butterflies, beetles, Hemiptera and orthopteroids, and there was a great incentive to collect *Galloisiana,* a grylloblattoid, in mountain region. I captured larvae of this insect and tried to rear them (1929f). On May 4, 1930, I met Mr J.L. Gressitt[3] on a road leading to Mt Takao-san; his first question was "What kind of insect are you collecting?"

In May 1931, I was offered the opportunity to travel to Okinawa Island where I found a rich insect fauna (1932, 1934c). Some of the dragonflies I took on this occasion were described later as new species (1947b, 1951f). The huge black-winged females of *Chlorogomphus brunneus brunneus,* flying serenely high overhead, made an unforgettable impression on me.

During the next three years of senior highschool I was fortunate enough to enjoy



Figs 1-3. Boyhood and early years: (1) On a trip at the foot of Mt Takao-san, April, 1924 (from left to right: my brother Eizo, myself, and our father Yasuhiko Asahina); — (2) With Eizo (left), as students of resp. Hokkaido and Tokyo Universities (April, 1938); — (3) Collecting in Kamikochi, Japanese Alps (August 13, 1938).

a fine natural environment in the western suburbs of Tokyo, where the highschool was located. There were grassy fields, paddies, ponds, springs, rivulets and forests of various broad-leaved trees. In these years I visited other habitats of dragonflies in the Tokyo suburbs and accumulated data about the majority of the Odonata found in the plains and hills in the western part of Tokyo. In 1933 I paid particular attention to the behaviour of *Epiophlebia superstes* in Mt Takao-san and described its flight activity, mating and oviposition (1934b, 1950j). The sound production of its larva was discovered at this time (1938e, 1939e). I was also fortunate to be able to join my father's botanical expeditions to South Sachalin 1932, Taiwan 1933-34 and Korea 1934.

In my highschool days German was taught as the second foreign language. As this instruction proceeded, I was happy to become more familiar with the German literature on Odonata. I had acquired a considerable number of continental European species by exchange, and I found that the most reliable books with which to identify them were Ris's Odonata in the *Süsswasserfauna Deutschlands* and Erich Schmidt's Odonata in the *Tierwelt Mitteleuropas.* Among the literature in English I used extensively Tillyard's *"Biology of dragonflies"* as a textbook. Kennedy's works on Odonata of Washington and Nevada attracted me by his elegant drawings. The Japanese literature at that time was all fragmentary, and Dr K. Oguma had already abandoned taxonomic work. Oguma overlooked Ris's papers, so that not a single species of Coenagrionidae has accurately been identified in Japanese literature. Needham's manual of Chinese Odonata (1930), which included a considerable number of Japanese species, seemed reliable, but I found occasional errors which I was later able to verify by checking material preserved at Cornell University and at other American institutions.

UNIVERSITY TRAINING

In april 1935 I was admitted to the Zoology course in the Faculty of Science, Tokyo University. The masters thesis may be completed in the third year, but I started early to accumulate data for an embryonic study of *Epiophlebia superstes* under the supervision of Dr H. Oka, a lecturer in the Institute of Zoology at that time.

During three years of University life, I went on the Hokkaido survey in the summer of 1935, being aided by my brother who was also in the Zoology course of Hokkaido University, Sapporo. In 1936 we surveyed Taiwan for two months. The collection of Odonata from this expedition contained a number of new species and subspecies and many unrecorded species; this constituted the basic material of my subsequent Taiwanese collection. In the summer of 1937 I went to Hokkaido again, and during these two visits to Hokkaido University, I made a complete record of the Odonata collection of Hokkaido University.

During these years, I published several taxonomic papers, a list of Hokkaido species (1938g), a description of a new highland *Aeshna* in Taiwan (1938f), and revised descriptions, in monographic style, each of a particular Japanese genus and species (1939a, c, d, f). In one of these papers, dealing with Eurasiatic *Nehalennia speciosa,* I described its larval stage for the first time (1939a), discovering both adults (1933) and larvae (1934) at the Ozegahara Moor.

During the University course I learned general biology and insect embryology from Dr Oka; but in the field of taxonomy the encouragement came from Professor T. Esaki, who often visited our laboratory from Fukuoka, Kyushu.

On a December day in 1937, while sectioning embedded dragonfly eggs, I hurt my left hand with a microtome blade! As a result of this accident, the subject of my thesis has been switched to a description of external features during embryonic development[1].

LAST YEARS OF PEACE AND THE WORLD WAR II PERIOD

After graduating from the Zoology course of Tokyo University, I joined the PhD course to continue my master's thesis. Now I had to change the subject of my research to medical entomology, and I joined the Research Institute of Infectious Diseases, Tokyo University. However, the exigencies of prewar period obliged me to go to the continent, in October 1939, as a member of the Civil Service.

Most of the dragonfly material I had dealt with until then was from the Japanese islands, but my interest was being expanded to the fauna of Kwangtung Province (1933a), Jehol (1937) and Manchuria (larvae 1940d, adults 1942).

World War II prevented us from enjoying contact with overseas specialists and from obtaining foreign literature, but before the War I had corresponded with Mr M.A. Lieftinck (since July 3, 1935), Professor C.H. Kennedy (since March 1, 1939), Dr Erich Schmidt (since May 11, 1939) and Professor P.P. Calvert (since July 13, 1939). I regret that I never met Professor Kennedy who died in 1952; he was invariably kind even adding "Professor Doctor" to my name which provided a source of amusement for my classmates. Two other authorities whom I admired but was never able to meet, were Dr F. Ris (died in 1931) and Dr R.J. Tillyard (died in 1937).

The years from 1940 to 1945 I spent in Manchuria. Besides performing duty work, I had opportunities to see the countryside and to collect insects, usually in the week-ends. I also travelled to many places in the area, including Jehol Province, and was able to find nearly 80 species of Odonata. I was impressed that nearly all the dragonfly species recorded by Bartenef from Amur, Ussuri and Transbaikalia also occur in northern Manchuria. Though some of my material from Manchuria was lost, the rest is still in my possession.

On April 5, 1940 I married Miss Terue Yoshioka at Tokyo. In May 1941 a

daughter was born to us and in February 1944 a son, and in the autumn of 1943 I brought my family to Tokyo. Thus, my family was fortunate not to suffer the post-war confusion that occurred on the continent. In August 1945, I moved to Dairen and finally, in late December, I left the continent on board of a small fishing boat, landing in North Kyushu after a six years absence from home.

EARLY DAYS AFTER THE WAR

My Tokyo house at Takadanobaba had miraculously survived the bombing, although nearly all the surrounding houses were burned to the ground. My parents and sisters had remained there, but my own family had moved to our summer house in Mishima, Shizuoka Prefecture, S of Mt Fuji. I joined them and lived there, cultivating some sweet potatoes to supplement our slender rations. My home in Mishima is surrounded with abundant spring waters, which hold a rich fauna of aquatic insects. Besides observing these insects, I began to prepare my PhD thesis. Although I still had an interest in dragonfly embryology, it seemed more urgent that, as a taxonomist, I clarify the comparative morphology of the Odonata. In this connection I was attracted then by the current works of Professor G.F. Ferris of Stanford University. It was fortunate that I still had some of the necessary literature in my Tokyo home, and there was around my home in Mishima abundant fresh material of *Davidius nanus* (Gomphidae) and *Mnais strigata* (Calopterygidae), so that a comparison with *Epiophlebia superstes* did not appear impossible.

I was unemployed until May 1950, but I had enlisted as a volunteer researcher in the Research Institute of Natural Resources, to undertake a biological study of *Hydropsyche* caddis-flies which were noted at that time to be pests of canals associated with hydroelectric generating stations (1951c, d). I also investigated insect pests of medicinal plants and drugs of stored-plant origin (1947e, 1948n).

During this period, there was an attempt to publish a revised edition of *Iconographia Insectorum Japonicorum*. I undertook the section devoted to Odonata and tried to illustrate all the Japanese species known at that time, excluding those from the Ryukyus and Bonins which were still under the US occupation. I revised the taxonomy, redescribed species and drew all the figures, 101 in total. This book was published in 1950. I believe it has greatly improved upon previous taxonomy of Japanese Odonata, although the *Iconographia* is but a synopsis and the descriptions are necessarily rather brief (1950i).

APPOINTMENT AT NATIONAL INSTITUTE OF HEALTH, TOKYO

The five years during which I was unemployed were a chaotic period for Japan. Friends and seniors advised me to get a job in a research institution. Finally, I decided to enter a newly established institution of public health, The National

Institute of Health, Tokyo, which was founded under the supervision of the US army, although I hesitated a bit since I had lost all my literature on medical entomology during the postwar confusion. Looking back on this time, I now believe that the choice made was the best for me for several reasons: as there was no tradition in medical entomology in Japan and as most of the newly appointed NIH colleagues had come from the Research Institute of Infectious Diseases, Tokyo University, a healthy freedom in research was maintained; and the new institution had a close relation with WHO, which afforded opportunities to visit overseas countries.

Joining NIH, Tokyo, in May 1950, my first duty was to arrange standard spray doses of insecticides for public health purposes, as well as to test new insecticides in the epidemic area of tsutsugamushi disease in Niigata. The latter work was very dangerous, as there were no established preventive means at that time. We entered the tsutsugamushi-infested fields wearing protective clothes, saturated with repellent.

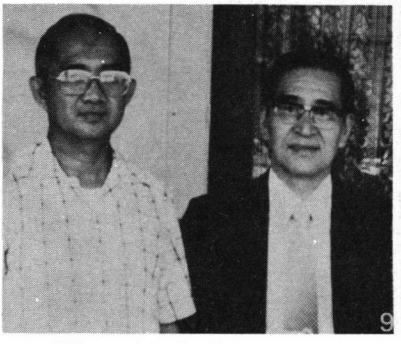
In the same period I joined the Ozegahara Moor research group, supported by the Ministery of Education. Based mainly on the 1950/51 survey, a report was published in 1954 (1954f). My report on the Odonata was the outcome of seven surveys, totalling 40 working days. In May 1952, under the leadership of Professor Esaki, we visited Sata Cape area at the extreme south of Kyushu. This survey yielded a considerable number of unrecorded southern insects, unknown from the main islands of Japan. As far as the Odonata were concerned, it was memorable that we captured *Chlorogomphus brunneus costalis,* formerly known only from the Ryukyu Islands (1953f).

In October of that year I was appointed the Department Chief, and on November 12, I was instructed to go to England for one year as a research student of STAC[5].

VISIT TO ENGLAND

I left Kobe on December 1, on board a cargo ship, Arima-maru, and sailed on the same route as many prewar travellers, who called it the "European route". It took 42 days to London, but during the journey I landed at Singapore and the

Figs 4-9. Fragments from odonatological journeys: (4) At the Haneda airport, on the way to the WHO conference in Geneva, and on to Bonn and Leiden to meet Drs Erich Schmidt and M.A. Lieftinck (September 11, 1959); — (5) At the Royal Ontario Museum, Toronto, after a visit to Dr E.M. Walker: with Drs S. Eda, G.B. Wiggins, and (seated) P.S. Corbet (December 11, 1967); — (6) With Dr M.A. Lieftinck, at the entrance of the Leiden Museum (August 21, 1968; photo Dr B. Kiauta); — (7) In the garden of the Kiautas home at Bilthoven nr Utrecht after attending the Second International Symposium of Odonatology, Karlsruhe (October 1973; photo Dr J.M. van Brink); — (8) Shaking hands with an orang-utan baby, Sepilok Forest Reserve, northern Borneo (June 30, 1982); — (9) With Bro. Amnuay Pinratana, at St Gabriel's College, Bangkok (March 13, 1983).



Suez Canal Zone, enjoying short collecting forays. At Genoa harbour, Dott. Cesare Nielsen was kind enough to come to Genoa from Bologna, and guided me to the Museo Civico di Storia Naturale, Genoa, where we met both Dott. F. Capra and C. Conci, and examined the historical Burmese collection of Leonardo Fea.

In London I finally secured a flat in Bayswater (82 Lansdowne Road, W 11), where I started to live, obtaining a ration book for food, as still required at that time.

I went to the British Museum (Nat. Hist.) on January 12 and met the Keeper of the Entomology Department, Mr N.D. Riley, who introduced me to Mr D.E. Kimmins. I also met Miss Cynthia Longfield for the first time. I was assigned a desk next to Miss Longfield and facing Mr Izzard, an expert of Hemiptera. This floor was the fourth and there were collections and cabinets of orthopteroids and neuropteroids (incl. Odonata), hemipteroids and the other smaller groups; there were also the offices of the Keeper and that of Dr W.E. China, the Deputy Keeper.

During my one-year stay I engaged in the identification and investigation of the material I had brought or been handed by my colleagues, and visited British institutions around London, related to entomology and public-health pests. These were: Cambridge University (Prof. V.B. Wigglesworth, Dr A.D. Lees, Rev. C.E. Tottenham), Oxford University (Hope Department, Dr B.M. Hobby and the other specialists), London School of Hygiene and Tropical Medicine (Prof. P.A. Buxton, Major H.S. Leeson, Dr J.R. Busvine), Rothamstead Experimental Station, Harpenden (Dr C.B. Williams, Dr C.G. Johnson, Dr C. Potter), Pest Infestation Laboratory, Slough (Dr G.V.B. Herford, Dr B.P. Moore, Dr W.A. Page), Pest Control Division, Tolworth (Dr J.W. Evans, Dr J.A. Freeman), and Freshwater Biological Association, Windermere (Dr T.T. Macan).

In addition to these visits I was fortunate enough to be able to check the historical collection of the Odonata in the Museum collection, and to solve several difficult problems, posed by a number of Japanese or Far Eastern species. The MacLachlan collection, which the Museum acquired in later years, contained valuable material. I attended the Royal Entomological Society of London meetings, regularly held at 41 Queens-Gate, and was admitted as a Fellow on October 7.

I first attended a RESL meeting on January 21 in the evening, when the President, N.D. Riley was retiring and Professor Buxton was taking the chair. It was on this evening that I heard that Dr Kennedy of Ohio had passed away, and was introduced to Mr A.E. Gardner. I also joined the South London Entomological and Natural History Society[6] and often joined its field meetings, learning of many collecting sites around London. On other weekends I used to travel alone to pleasant Odonata collecting sites in the vicinity of London.

It was January 20 that I first met a young Cambridge student, Mr Philip S.

Corbet who had come to the fourth floor of the Museum, perhaps in order to talk with Miss Longfield about their forthcoming book *"Dragonflies"*. It was May 5 that I first met Mr Elliot Pinhey. Colonel F.C. Fraser I met for the first time on March 16 in the Museum. I believe I was very fortunate to have stayed at the Museum, because I could meet or be introduced to so many European and American specialists. This enabled me to visit or to meet these overseas entomologists during my later travels.

TO THE CONTINENT OF EUROPE

Nineteen fifty-three was coronation year and Crown Prince Akihito of Japan visited England. In August, the XIVth International Congress of Zoology was held at Copenhagen, and I attended as one of the delegates from Japan. Arriving at Copenhagen on August 4, I joined four Japanese members, including Professor Esaki. On this occasion I was allowed to study the Suenson collection of Chinese Odonata, preserved in the Zoologisk Museum, through the kind offices of Dr S.L. Tuxen, the Director (1955f, 1956k).

After the Congress I went to Bonn, to visit Dr Erich Schmidt at his house (Mozartstrasse 22). I stayed for six days, including one day during which I travelled to Frankfurt am Main to see the Ris collection in the Senckenberg Museum. I then moved to Brussels where, by studying Selys' collection for five days, I was able to solve many longstanding puzzles concerning Japanese Odonata. I then returned to London and on September 7 flew to Paris to join Professor Esaki again and stayed there for a week. I checked the Martin collection carefully, solving enigmas caused by his careless treatment. I saw the historical fossil specimens of *Meganeura monyi* in the exhibition room of the Museum. There was no specialist on Odonata at that time in the Museum, but I met noted entomologists, such as R. Jeannel, L. Séguy, L. Chopard, L. Berland, J. Carayon and others. I was delighted to meet at his home Monsieur H. Stempffer, with whom I had corresponded for about 20 years, exchanging butterflies for dragonflies.

On December 27 I ended my sojourn of almost a year in London and went to North America by air. I had three unforgettable experiences before I left London. First, December 16 I visited Dr F.F. Laidlaw at his home in Ventnor, Isle of Wight. I was very glad to meet this noted leader in Oriental odonatology. Second, I was able to see living specimens of the mecopteran *Boreus hiemalis* which Mr E.E. Syms of South London had so kindly given me on December 14. I travelled keeping these insects alive with me on my way back home. But regrettably they died while in the United States. Third, on December 2, while I was in the Museum, a thief visited my room taking my camera and a little money. This last event could perhaps be regarded as a kind of exorcism from our traditional Buddhists' way of thinking!

TO THE UNITED STATES

The air-route I took was a bit complicated: our plane went via Prestwick (Scotland), Keflavik (Iceland), over Greenland to Gander (Newfoundland), and finally arrived at Boston.

At Harvard University, Professor F.M. Carpenter kindly showed me the famous fossil specimens of *Kennedya* and *Ditaxineura*. At Amherst, Mass., I was allowed to stay one night at Professor C.P. Alexander's home and he talked about Dr H.-f. Chao who had stayed there for his PhD studies. At the American Museum of Natural History, New York, I saw some interesting Chinese material, once worked on by Mrs Klots. Then, at Cornell University, I owed much to Mr H. Dietrich, who brought me to J.G. Needham's home. I paid my respects to this venerable odonatologist, who was in an armchair and who kindly signed his book of American Anisoptera I brought, but I could not understand his speech at all.

At Philadelphia, the aged Dr P.P. Calvert kindly met me at the entrance of the Academy of Natural Sciences, Philadelphia, and I had a memorable night at his home in Cheyney. In Washington, D.C., Dr Paul Oman guided me to the U.S. National Museum, where I unexpectedly and very happily met Dr R.E. Snodgrass. At Urbana I was also fortunate to visit Mrs Leonora Gloyd at her home. In San Francisco, through the kind offices of my friend Dr Paul Arnaud Jr, I examined long series in the very interesting collection of the California Academy of Sciences. Finally I went to Stanford University, where I was fortunate to meet Prof. G.F. Ferris, by whom I was much influenced in my work on *Epiophlebia* morphology. My friend Dr Ryuichi Matsuda was working there at that time.

BACK IN JAPAN: EXPANSION OF ACTIVITIES

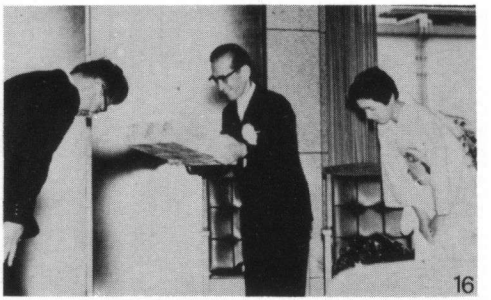
I crossed the rough northern Pacific on board a Japanese cargo ship and arrived at Yokohama on February 14, 1954. In the meantime, during my stay in England, I had been awarded the Degree of Doctor of Science on April 4, 1953; later my thesis was published from the Japan Society for the Promotion of Science (1954i). On the basis of this work, I was subsequently awarded the 1956 Prize of the Zoological Society of Japan.

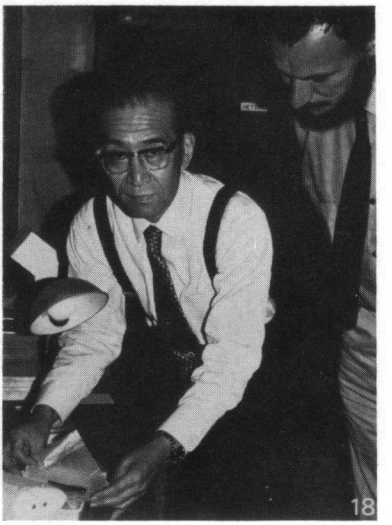
The duties I took part in thereafter in NIH, Tokyo, were varied: the investigation of DDT-resistance in human lice, at the suggestion of WHO; the survey and control of the urticating moths occurring widely in Japan; the interviewing of noted scientists sent from WHO: and participation in WHO seminars, held at various places. The first such seminar was held at New Delhi (February, 1958), and after the seminar I visited the Zoological Survey of India, Calcutta, where I learnt that the single larval specimen of *Epiophlebia laidlawi* had gone astray during the wartime confusion. I then went to Darjeeling and rediscovered it (1958i). After attending a panel meeting, held in Geneva, in

Figs 10-14. Dragonfly collecting all over the world: (10) Searching for the larva of *Libellula angelina* at Mobara, Chiba Prefecture (May 13, 1956); — (11) In a jungle stream, Amami-oshima, the Ryukyus (July 10, 1959); — (12) Omiya, Saitama Prefecture: a *Libellula angelina* collecting trip, with Dr S. Eda (May 17, 1964; photo Dr S. Eda); — (13) After a successful collecting of *Epiophlebia superstes* larvae (August 16, 1972). Kibune valley, Kyoto: hand-shaking of "two Presidents", Dr P.S. Corbet (of the Entomological Society of Canada) and myself (serving then in this office of the Entomological Society of Japan); — (14) In the Rockies, just having missed an *Aeshna palmata:* during the Post-Symposium Tour of the Seventh International Symposium of Odonatology, Calgary (August 21, 1983; photo M. Kiauta).

September 1959, I again visited Bonn and Leiden. This was the first time I met Dr M.A. Lieftinck. I then went to Lund, Sweden, to meet Dr K. Princis and to learn about Blattaria in his laboratory. In September 1963 a WHO symposium was held at Gainesville, Florida, for the discussion of culture methods of laboratory medical insects. After the meeting I spent several delightful days, being warmly welcomed by the Westfalls there.

During this period the Ryukyu Islands were still under the control of the US





Figs 15-18. The "retirement" and afterwards: (15) The dragonfly collection has been always kept at my Takadanobaba home (1969), (therefore) — (16) The formal "retiring commemoration" (did not have much impact on my "odonatological activities"; it) took place on June 2, 1979: Dr S. Eda presenting to my wife and myself an ornamental plate with dragonfly figures; — (17) The *Tombo* "Editorial Office" also continues to function at Takadanobaba: Mrs M. Kiauta insisted to take this photograph, with my wife and the recent issue of *Tombo*, in our living room (May 22, 1979); — (18) With Dr B. Kiauta, inspecting my Thai *Chlorogomphus* collection (May 23, 1979; photo M. Kiauta).

army. A binational research project "Zoogeography and Ecology of Pacific area Insects"[7] had started. Dr J.L. Gressitt was the chairman on the American side and I was on the Japanese side. Specialists from both countries visited western Pacific areas, including the Ryukyus, Taiwan, Hong Kong and Thailand. Knowledge of the insects of the Ryukyu Islands has greatly been expanded through this project (1954b, c, k, o). As for the Taiwanese, Hong Kong and Thai fauna, fresh material for study was obtained during this project. In December 1967 a seminar entitled "Biogeography and phylogeny of Pacific area insects" was held at Washington, D.C. in connection with the above mentioned project. After this seminar I went to Toronto on December 11, together with Dr Shigeo Eda who had just been working at Buffalo, and was able to visit Dr E.M. Walker in hospital, accompanied by Dr Glenn Wiggins and Dr P.S. Corbet.

NEW AND RENEWED INTERNATIONAL CONTACTS

In July 1968, the XIVth International Congress of Entomology was held in Moscow, where I was delighted to meet again Dr Lieftinck, Dr Corbet and Miss Longfield. After the Congress I went again to Lund for cockroach work, and again to Brussels where, aided by Mr R. Cammaerts, I carefully checked the *Mnais* specimens in the Selys Collection. Then, at the British Museum (Nat. Hist.) in London, I examined some specimens of cockroaches and ceriagrions in the Fraser Collection. I also accidentally met Dr B.E. Montgomery in the Museum. I then went to Leiden again, was welcomed by the Lieftincks, and met Dr B. Kiauta for the first time.

I visited Dr Erich Schmidt a third time, but at this period he had moved to a farm house in Kippenhohn, near Königswinter. His collections were in a warehouse and he had already expressed his intention to leave them to me. On my departure on August 24, he saw me off at the bus stop near Bonn Station, where we shook hands for the last time.[8]

At Frankfurt airport I met Dr G. Jurzitza and then went to Addis Ababa to meet Dr T. Ohse who helped us in our OTCA project[9] in the study of onchocerciasis there. In 1970 I again went to Ethiopia, where some East African dragonflies were obtained from the onchocerciasis-infested area.

On the occassion of the XIIth Pacific Science Congress, held at Canberra, in August 1971, I visited old collecting sites of Tillyard, including Kuranda near Cairns. In Sydney I met again with Dr J.W. Evans, who kindly invited me to stay at his home, and we talked about the late Dr R.J. Tillyard. Mrs Evans is the second daughter of Dr Tillyard. I also met my old friend M.I. Nikitin and his mother. Leaving Cairns, I went to Wau, Papua New Guinea, to stay at Dr Gressitt's Wau Ecology Institute for several days.

As is well known, SIO started in that year, and in September 1973 the Second Symposium was held in Karlsruhe. I attended this and enjoyed the programme

enormously (1974a). I then went to West Berlin (Zoologisches Museum) and East Berlin (Eberswalde), and visited Leiden (Rhenen), Brussels and London three times, and Paris and Lund twice. At Rhenen Dr Lieftinck welcomed me again, and I visited Dr Kiauta at the University of Utrecht, and at his home in Bilthoven.

VARIOUS RESEARCH PROJECTS AND TEACHING

In the late sixties I was absorbed in a survey of transoceanic insects encountered around Japanese territories. This arose from my impressions in England, where researches on insect dispersal had been in progress for a long time, and where fundamental work on plant-lice and locusts had been conducted. Fortunately, one of my highschool classmates was Head of the Section of Ocean Weather, in the Meteorological Agency, and at his suggestion I found a good collector on a weather-ship. Originally my purpose was to catch mosquitoes, which might bring Japanese encephalitis virus from the south, and to get dragonflies as well. I obtained some expected results, particularly concerning the transoceanic migration of dragonflies, but in addition to these, an unbelievable variety of insects was found to come regularly from the Southwest. One example was the leaf-hopper, a notorious pest of rice culture. This insect had long been believed to hibernate in Japan, so that their diapause physiology had been extensively studied until that time.

In these years a publisher, Nakayama Shoten, attempted to issue a series of handbooks on systematic zoology. I was assigned to write the chapters on insect phylogeny (fossil), Odonata, Blattaria and Grylloblattoidea (1970l, 1971c, d, e).

During the subsequent two years I tackled a revision of the Asiatic calopterygid genus *Mnais*, a representative of which is distributed commonly on the four large islands of Japan and which has developed complicated colour polymorphism. After revising all the continental Asiatic species (1974k, l, 1975c, d, f, g, i), I finally proposed a hypothesis with regard to Japanese forms (1976m).

Many Japanese entomologists participated in the XVth International Congress of Entomology, August 1976, Washington, D.C. After the Congress, I stopped over in Philadelphia, New York, Ithaca (Cornell), Cambridge and San Francisco, in order to study Odonata and Blattaria.

I never joined the staff of any university, but after joining the NIH staff, I was requested to lecture on basic entomology or systematic zoology as a part-time lecturer at: Tokyo Kyoiku University (Fac. Sci.) 1951-1965 (excepting 1953), Tokyo Metropolitan University (Fac. Sci.) 1965-66, Tokyo University (Fac. Agr.) 1965, Nagoya University (Fac. Sci.) 1969, Hiroshima University (Fac. Sci.) 1970, Tokyo University (Fac. Sci.) 1973, and at the Ochanomizu University (Fac. Sci.) 1974.

TOMBO AND VARIOUS SOCIETIES

The Society of Odonatology, Tokyo, started in 1957 and the first volume of its periodical, *Tombo, Acta odonatologica,* was issued in 1958. This journal was at first expected to be a kind of a newsletter, but it was soon changed into a journal, filled with original reports. Dr S. Eda cooperated extensively in its management, and I first thought that it would cease on my retirement. However, in response to the demand of members, it was decided to continue it, although business matters, including finance, were placed in the hands of Dr Eda in Matsumoto, while I continue to attend to editorial matters in Tokyo.

For some biological societies I have served as President: Entomological Society of Japan, 1971-72; Japan Society of Sanitary Zoology, 1959, 1970-71; Japanese Society of Systematic Zoology, 1982-83; SIO 1981-83.

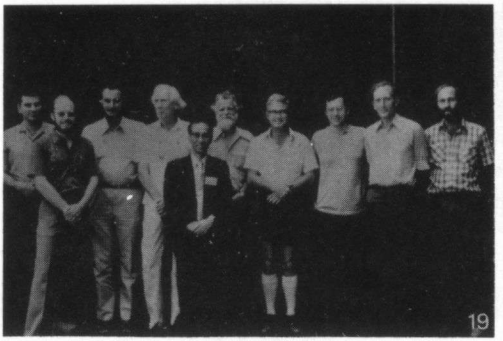
FURTHER WORK IN MEDICAL ENTOMOLOGY

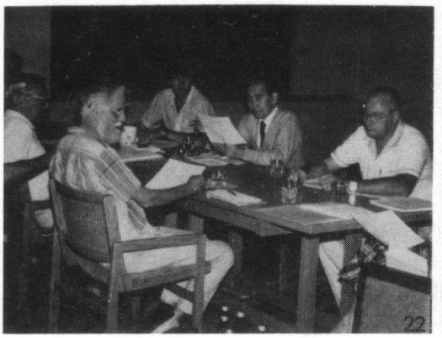
Up to the end of 1970s one may say that insect-borne diseases have come to an end in Japan, the countermeasures being officially well organized. There remain various household pests, including cockroaches. Hence many pest-control companies were established in Japan, so that our medical entomologists are now able to devote themselves largely to basic research, as well as meeting frequent requests to cooperate with overseas countries, in particular, those in the developing southeastern Asian area.

In the late 1970s I was involved as a consultant for insect-borne diseases in a project "Provincial Public Health Supporting Project in Chantaburi Province, Thailand", supported by JICA[10]. This enabled me to become familiar with the Thai odonate fauna. On the other hand, the entomology staff of the National Science Museum, Tokyo, are continuing to survey the Himalaya under a grant from the Ministry of Education. I remember that in 1953, when I was in London, I had an opportunity to work on Nepalese Odonata, collected by the Kyoto University Expeditions (1955c). Since then I have a continuous interest in the fauna of this region and in 1980 I myself visited the mountains of the Kathmandu Valley. In the next year I surveyed again the same area to obtain information about the conservation of *Epiophlebia laidlawi,* supported by IUCN and WWF (1982b).

While I have an interest in the southasiatic fauna, I have always had a deep concern for our domestic dragonfly world. After 25 years, a revised survey of the Ozegahara Moor was made, and we have confirmed that the odonate population is being well preserved there (1982q).

As a result of rapid industrial development, there arose, in the 1970s, an urgent need to protect the natural environment of our country. The Environmental Agency of the Government started in 1971. As a part of the nature conservation





Figs 19-24. The SIO activities: (19) In the framework of the XVIth International Congress of Entomology, I had the pleasure to host in Kyoto, on August 4-5, 1980, the Inaugural Meeting of the Odonata Specialist Group of the Species Survival Commission, International Union for Conservation of Nature and Natural Resources (IUCN), chaired by Dr N.W. Moore; here the participants (from left to right): Dr F.G. Howarth, Dr R.A. Cannings, Dr B. Kiauta, Dr G.H. Bick, myself, Dr P.S. Corbet, Dr J.A.L. Watson, Dr H.J. Dumont, Dr N.W. Moore, and Dr D.R. Paulson (photo Dr E. Schmidt); — (20) In the same meeting: delivering a report on the situation in odonata conservation in Japan; — (21) During the first of the three odonatological meetings (at Kyoto-shi Dento-sangyo Kaikan, Kyoto, August 7, 1983), organised in the framework of the XVIth International Congress of Entomology by the Tokyo Society of Odonatology, the SIO National

plan of this Agency, the knowledge and cooperation of entomologists are being requested. In other words, alongside pest-control work, the protection of insects, as a natural resource, was already becoming an urgent necessity! (1981f, 1982f, g, r).

"RETIRED"

On april 1, 1979 I formally retired from NIH, Tokyo, but continued my affiliation with that institution as a guest scientist ever since.

In the next year we had the XVIth International Congress of Entomology in Kyoto. Among the participants, some 2200 or more, there were a number of SIO colleagues, while some others came to Kyoto in connection with the Inaugural Meeting of the Odonata Specialist Group of the Species Survival Commission, International Union for Conservation of Nature and Natural Resources (IUCN). We have worked busily to prepare this important odonatological gathering. In addition, the Tokyo Society of Odonatology, the Kansai Research Group of Odonatology, and the SIO National Office in Japan jointly organised three odonatological meetings, in Kyoto and Osaka, combined with field trips in the Kansai area. These were wonderful days, in the midst of our "dragonfly family", and the main credit for the splendid organisation goes to Mr Kiyoshi Inoue.

In August, 1981, at the VIth International Symposium of Odonatology, Chur, Switzerland, I was elected President of SIO, *in absentia*. I deeply regretted I was unable to attend the Chur meeting in person, but I was happy to participate in the VIIth Symposium, in Calgary, Canada, in August 1983. It was a delightful occasion.

During the Calgary meeting, the colleagues must have learned that my 70th birthday fell on June 10 of that year. During the evening of August 18, after the Symposium Banquet, I was unexpectedly congratulated by all those present. This occasion was perhaps one of the most memorable of my life, and could hardly have featured in the aspirations of the seven-years-old boy 63 years earlier!

Office in Japan, and by the Kansai Research Group of Odonatology (Osaka), with Dr S. Eda (left) and K. Inoue, Leader of the Japanese SIO Office (right); — (22) In the quality of President of SIO (1981-1983), chairing a meeting of the Council during the Calgary Symposium; from left to right: Dr B. Kiauta (partly out of picture), Dr M.J. Westfall, Dr P.S. Corbet, Dr K.J. Tennessen, myself, Dr J.-G. Pilon, and (mostly out of picture) Dr J.M. van Brink; — (23) During the "Barbecue Party" at the Calgary Symposium: chattering with the present President of SIO, Dr M.J. Westfall (August 17, 1983); — (24) The current SIO Council, in the final Calgary session, under the chairmanship of Dr M.J. Westfall, working on the 1983-1985 development schedules of the Society (from left to right: myself, Dr B. Kiauta, Dr J.-G. Pilon, Dr J.M. van Brink, Dr. P.S. Corbet, Dr. G. Pritchard, Dr M.J. Westfall, Dr J. Legrand, partly out of picture). — (Figs 20-24: photo M. Kiauta).

FOOTNOTES

[1] Yasuhiko Asahina (1881-1975), Professor of Pharmacology, Tokyo Imperial University, who later became an authority of lichen chemistry and taxonomy.
[2] Éizo Asahina, now Professor Emeritus, Hokkaido University, and Past-Director of the Institute of Low Temperature Science, Sapporo.
[3] At that time a student of the American School, Tokyo.
[4] The comparative embryology of the Odonata was later the subject of a study by my friend Dr Hiroshi Ando in the Tokyo Kyoiku University, under the guidance of Professor H. Oka.
[5] Scientific and Technological Administration Committee.
[6] The President was Mr E.W. Classey. I often visited his bookstore and obtained important literature there.
[7] A project in the Japan-US Cooperative Science Program.
[8] Dr Erich Schmidt died on August 22, 1969 (Asahina, 1970m).
[9] Overseas Technical Cooperation Agency of Japan.
[10] Japan International Cooperation Agency.