



FLY TIMES



APRIL, 1995 - No. 14

Here in southern British Columbia spring has sprung! The Shepherdia, Salix and Acer are all in bloom in the valleys and attracting loads of ceratopogonids, empidids, phorids, and chironomids. How wonderful to be back observing and collecting after a winter of pounding on the computer and staring through microscopes!

This issue includes a major contribution by Dick Vockeroth who provides a new key to Dolichopus found in the Ottawa area but which will work for most species found in the eastern USA and southeastern Canada.

As usual, the Fly Times accepts any and all submissions and encourages all of you to contribute to the next issue. It would be particularly valuable to hear about the research plans of others. In times of shrinking support for whole organism biology (and particularly for systematics), cooperative efforts may be of benefit to some; let us know about your field trips!

Issue No. 15 of the Fly Times will appear next October and all contributions should be sent by September 30, 1994 to:

Dr. A. Borkent,
1171 Mallory Road,
R1-S20-C43,
Enderby, British Columbia,
VOE 1V0, Canada.

For those of you with short contribution you can phone in your message at (604) 833-0913. FAXes may be sent to (604) 832-2146.

NEWS

North American Dipterists Society Field Meeting

As you all know from the notice sent out on February 9, the next North American Dipterists' Society gathering will meet in San Gerardo, Costa Rica on August 7-11.

Anyone wishing to present a paper at this fourth field meeting of the NADS should contact Brian Brown, who will be arranging the presented papers session, and would appreciate receiving your presentation title by July 1, 1995. Here's his address:

Dr. B.V. Brown,
Curator of Entomology,
Natural History Museum of Los Angeles,
900 Exposition Boulevard,
Los Angeles, California,
90007, U.S.A.

E-mail: brianb@mizar.usc.edu
FAX: (213) 746-2999

VI Latinoamericano Congreso de Entomología
and the XXXI Nacional Congreso de Entomología

These meetings will be held May 26-30 in Ciudad de Mérida, Yucatan, Mexico and include sessions on the following: Acarology and Arachnology, Ecology, Biological Control, Economic Entomology, Forest Entomology, Medical and Veterinary Entomology, Physiology and Toxicology, Systematics and Morphology.

If you want further information (you'll need to be quick!) contact the following:

Sergio Ibanez Bernal or Carmen Martinez Campos,
Laboratorio de Entomología, INDRE, S.S.A.
Prol. de Carpio 470, 2do piso,
Col. Santo Tomas,
11340 Mexico, D.F. Mexico

Telephone (5) 341-4880, (5) 341-4700
FAX (5) 341-1168, (5) 341-3264

Bueno suerte!

Dipterology Claims Another Position

Dr. Terry A. Wheeler started a position as Assistant Professor of Systematic Entomology at McGill University in January 1995. Terry will continue his studies on the systematics of Chloropidae as well as some other acalyptrate families that have nobody to care for them. He will also continue to dabble in the morass that is schizophoran higher classification.

Terry's new address is:

Department of Natural Resource Sciences
McGill University, Macdonald Campus
Ste-Anne-de-Bellevue, Québec
H9X 3V9
Canada

TEL: (514) 398-7937

FAX (514) 398-7990

Email: wheeler@nrs.mcgill.ca

Despite his current location Terry promises to continue corresponding in English, although he is aussi disponible en Francais.

Yet Another Directory of Dipterists

Not being one to turn my back on petty administrative duties I could not close the files on the Third International Congress of Dipterology without performing one last mindless task. So, in response to the requests of numerous (well, three) colleagues I went back into the registration forms and compiled a list of email numbers of dipterists at the International Congress in Guelph. I have pulled the email numbers from the registration forms of those who supplied them when they registered. Anyone who would like a copy of the list can contact me (wheeler@nrs.mcgill.ca) for an electronic copy (I thought about making hard copies available via pulmonate post but it seemed a bit paradoxical).

Terry A. Wheeler

(see address elsewhere in this exciting issue)

C. P. ALEXANDER AWARD

The North American Dipterists' Society

recognizes

Willis W. Wirth

as our most productive dipterist

and

for his critical and unique contributions in

expanding our knowledge of flies,

especially biting midges and shore flies,

educating and encouraging

a cadre of world leaders

for Systematic Dipterology.

Brian Brown

Bob Roberts

Neil Rice

Jeff Cunningham

Wayne H. Martin

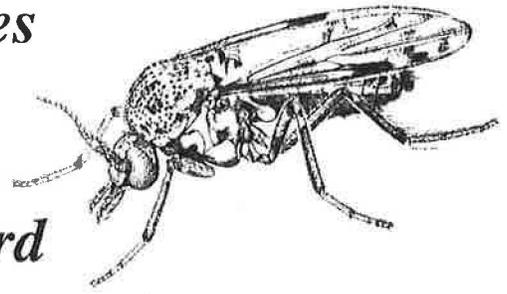
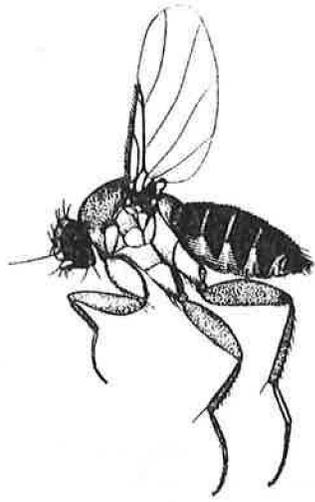
John J. Thompson

Christie Thompson

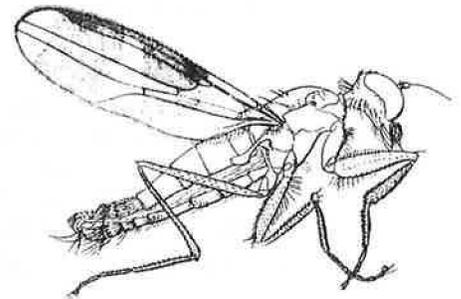
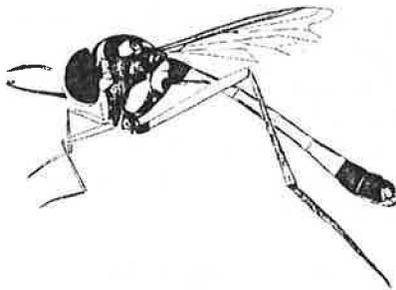
Marty Wood

Guelph
August 1994

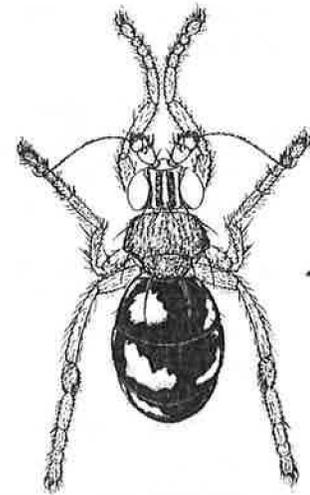
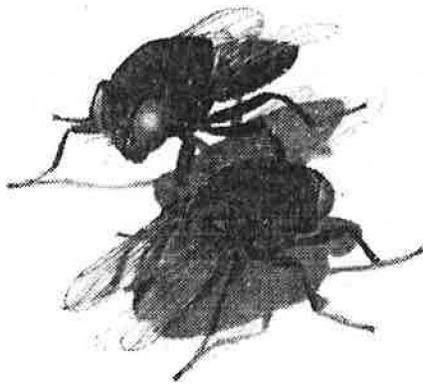
NADS recognizes WWWirth with 1st Alexander Award



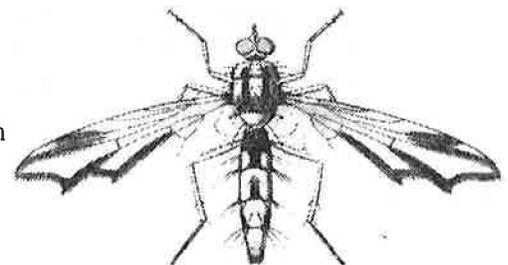
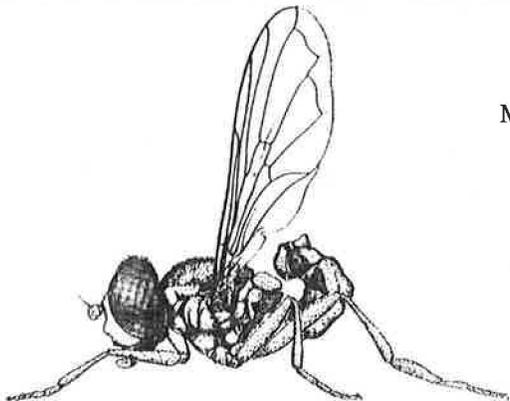
The North American Dipterists' Society held a special meeting during the 3rd International Congress of Dipterology at Guelph last August. The purpose was to recognize the greatest living American dipterist! Hence, the C. P. Alexander Award was established to publicly acknowledge the most important and influential member of NADS.



Willis W. Wirth was unanimously recognized as our most productive member. Unfortunately, due to Bill's declining health, time was not available to convene a public forum in which to present the award. The award was presented to Bill on 27 August by the Gainesville chapter (Gary Steck, George Steyskal, Frank Mead and others). The Award consists of 3 framed panels, central is reproduced on the left page, side panels here. The award was signed by the "operators" of NADS. The side panels depict flies typical of the groups that these signers worked on: On the left, Brian Brown (*Megaselia scalaris*), Wayne Mathis (*Placopsidella grandis*), Neal Evenhuis (*Systrophus tetradactylus*) and Chris Thompson (*Anu*); and on right, Art Borkent (*Culicoides variipennis*), Jeff Cumming (*Sicodus annulimanus*), Steve Marshall (*Pterogramma* n.sp.), and Monty Wood (*Euantha dives*).



The C. P. Alexander Award recognizes outstanding contributions to North American Dipterology and American dipterists. The "operators" of NADS welcome suggests for further Awards.



27th Annual Biting Fly Workshop

from C. Steven Murphree

The 1995 Biting Fly Workshop will be held in Tennessee on Wednesday-Friday, May 17-19. The location will be the NaCoMe Conference Center near Centerville, Hickman County, in southwestern middle Tennessee. This is approximately 65 miles southwest of Nashville, 30 miles south of I-40, and 45 miles west of I-65.

The NaCoMe Conference Center is owned by the Cumberland Presbyterian Church and is well-maintained by its staff. It includes cabins, two auditoriums, meeting rooms, outdoor recreational areas, and on-site dining facilities. The rates are \$24.50 per day for lodging and all meals (12 years+); \$14.25 per day (ages 3-11) and free to ages 2 and under. We will be staying in 4-room cabins and a dormitory-style group lodge. Each cabin room sleeps 3-5 people (or a family) and has a bathroom. Each group lodge room can sleep 1-3 people and 3 bathrooms are available for the lodge's 8 rooms.

While staying at NaCoMe is encouraged, motel accommodations are available in Centerville (14 miles), Linden (18 miles) and Hohenwald (17 miles). The center is also within reasonable driving distance of Mousetail Landing State Park on the Tennessee River, David Crockett State Park near Lawrenceburg, and the Natchez Trace Scenic Parkway.

The Center is located on 640 acres of woodlands (mostly hardwoods) with Sulphur Creek flowing through it. In addition, there are extensive government-managed woodlands surrounding the Center and extending about 4 miles to either side of the access road. Hickman County and nearby Lewis and Perry Counties are situated on the Tennessee's western Highland Rim and have many ridges and "hollers" but also include swampy areas and streams which flow into the Duck, Buffalo, and Tennessee Rivers. The area is heavily forested and is home to the largest deer populations in middle Tennessee. Also, few biting fly collections have been made in this area so it should provide excellent collecting opportunities.

The format of this year's meeting will be much the same as that of previous years, with informal discussions, sharing of information, and a flexible schedule. We will remember our good friends and colleagues, Bill Wirth and John Linley, hear invitational presentations, go collecting, and generally enjoy our time together. Jim Goodwin has agreed to be our tabanid invitational speaker.

Details concerning the program, collecting trips, accommodations, and travel to NaCoMe will be provided in a second mailing. If you are interested in attending this year's Biting Fly Workshop, please fill out the form below and return it to me. I will have the second mailing to those who pre-register by early April.

Mark your calendars now for May 17-19 and make plans to join us in the Volunteer state!

BITING FLY WORKSHOP - 1995

NaCoMe Conference Center, Hickman County, Tennessee
Arrive evening of Tuesday, May 16, meeting 17-19

Name: _____

Number and gender of guests who will be accompanying you _____

I plan to stay at the NaCoMe Conference Center _____

I would prefer to stay in a cabin room _____

I would prefer to stay in a group lodge room _____

I would rather stay at the nearest motel or state park _____

⇒ Mail to: Steve Murphree, Biting Fly Workshop, Department of Biology, Belmont University, 1900 Belmont Blvd., Nashville, TN 37212-3757

Registration Fee: \$10, check made out to Steve Murphree, BFW

Lodging and Meals Fee: payable at the meeting.

redacted Far Side, 8/18/1988

redacted Far Side, 8/28/1990

Key to male *Dolichopus* of Ottawa district¹

Dick Vockeroth

[Editor's Note: Dick has allowed us to reproduce the following key so that readers can use it in combination with the published key by Robinson (1964, Misc. Publs. ent. Soc. America 4: 151) to identify most species of *Dolichopus* that occur in the eastern U.S. and southeastern Canada - JMC.]

- | | | |
|----|--|-------------------------------------|
| 1. | At least one pair of femora mostly or entirely black | 2 |
| - | Femora yellow, at most fore femur narrowly darkened above and hind femur dark at apex | 16 |
| 2. | Posterior orbital cilia mostly or entirely black | 3 |
| - | Posterior orbital cilia on lower half of head pale | 10 |
| 3. | Squamal cilia pale | 4 |
| - | Squamal cilia mostly or entirely black | 5 |
| 4. | Hind tibia yellow with apical 1/5 black, the black area sharply defined. Posterior surface of hind tibia with a bare dorsal stripe along most of its length and with a patch of small black setae just before mid length. Mid tibia with strong ventral bristle at or immediately beyond level of last anterodorsal bristle | <i>laticornis</i> Loew |
| - | Hind tibia black (except dorsally) on about apical 2/3, the black area not sharply defined. Posterior surface of hind tibia with a bare area on dorsal 1/2 of second fourth, beyond this point with uniform black setae. Mid tibia with weak anteroventral to ventral bristle well beyond level of last anterodorsal bristle | <i>nodipennis</i> v.D. |
| 5. | Hind femur ciliate below. First flagellomere not more than 1 1/2 times as long as wide | 6 |
| - | Hind femur not ciliate below. First flagellomere three times as long as wide | 9 |
| 6. | Hind femur with ventral cilia about 1/2 as long as femoral diameter. Mid femur mostly yellowish, only a little darkened at base | <i>flavilacertus</i> v.D. |
| - | Hind femur with ventral cilia at least as long as femoral diameter. Mid femur black, at most yellowish at apex | 7 |
| 7. | Face silvery white. Tarsomere 1 of mid leg with dorsal bristle. Mid tibia with five ventral bristles | <i>packardi</i> v.D. |
| - | Face yellowish brown. Tarsomere 1 of mid leg without dorsal bristle. Mid tibia with one ventral bristle | 8 |

¹ The Ottawa district is defined here as a 50 km. radius from the parliament building Peace Tower. *D. absonus*, *splendidulus*, *adultus* and *blandus* have not been recorded but almost certainly occur here.

8. Ciliolium (row of minute closely-set hairs on dorsal side of apical part of hind tibia) at least 0.40 mm. long, with a row of three bristles preceding it. Cercus narrower than long, broadest near base *calcaratus* Aldrich²
 - Ciliolium 0.26 mm. long, with a row of four to six bristles preceding it. Cercus subquadrate, broadest near apex *gratus* Loew
9. Arista at middle of upper margin of first flagellomere. Mid femur almost entirely yellowish. Cercus whitish with narrow black apical border *incongruus* Wheeler
 - Arista well beyond middle of upper margin of first flagellomere. Mid femur blackish at base and sometimes on most of basal half. Cercus yellowish, with broad apical margin and narrow dorsal margin blackish *adultus* v.D.
10. Mid tibia black 11
 - Mid tibia yellow 12
11. Hind femur ciliate below. Cercus blackish *detersus* Loew
 - Hind femur not ciliate below. Cercus whitish with narrow black border
 *ovatus* Loew
12. Tarsomeres 3 and 4 of hind leg with strong black dorsal fringe
 *remipes* Wahlberg
 - Hind tarsus simple 13
13. Wing with well-defined black apical spot *setifer* Loew
 - Wing unmarked 14
14. Frons with dense silvery pollen nearly obscuring the ground colour. Squamal cilia pale *agronomus* Mel. & Brues
 - Frons shining green or bluish. Squamal cilia black 15
15. Hind femur ciliate below. Cercus with long sparse apical hairs
 *albiciliatus* Loew
 - Hind femur not ciliate below. Cercus with short dense apical hairs
 *barbicauda* v.D.
16. Posterior orbital cilia mostly or entirely black 17
 - Posterior orbital cilia on lower half of head pale 19
17. Fore tarsus plain. Hind femur not ciliate below sp. 6
 - Fore tarsus ornamented. Hind femur ciliate below 18
18. Mid and hind femora each with one preapical bristle. Fore leg with tarsomeres 3 to 5 compressed. Mid tibia with five ventral bristles *pachycnemus* Loew

² The very similar species *gaigei* Steyskal may occur; see Steyskal (1973, J. Kans. ent. Soc. 46: 347-359) for key (couplets 69-70) and figures.

- Mid and hind femora each with three preapical bristles. Fore leg with only tarsomere 5 compressed. Mid tibia with one ventral bristle *lundbecki* Cn.
19. Fore tarsus ornamented³ 20
 - Fore tarsus plain 43
20. Bend in last section of vein M with stump vein 21
 - Bend without stump vein 23
21. Hind femur not ciliate below. Tarsomeres 3 and 4 of fore leg without dorsal hair fringe *bifRACTUS* Loew
 - Hind femur ciliate below. Tarsomeres 3 and 4 of fore leg with dorsal fringe of strong black hairs 22
22. Tarsomere 3 of fore leg with only narrow apex black, considerably deeper than tarsomeres 2 and 4. Cilia of hind femur not 1/2 as long as femoral diameter *absonus* v.D.
 - Tarsomere 3 of fore leg with apical 1/2 black, not deeper than tarsomeres 2 and 4. Cilia of hind femur longer than femoral diameter *cuprinus* Wied.
23. Hind femur ciliate below 24
 - Hind femur not ciliate below 31
24. Fore leg with tarsomeres 3 and 4 black, 5 white. Antenna with scape, pedicel and base of first flagellomere yellow. Squamal cilia black *ainsliei* v.D.
 - Fore leg with tarsomeres 3 and 4 pale, 5 black. Antenna black, at most with scape and pedicel yellow below. Squamal cilia pale or black 25
25. Fore leg with tarsomere 3 at least 1 1/2 times as long as 4 26
 - Fore leg with tarsomeres 3 and 4 subequal in length 29
26. Hind tarsus with tarsomeres 1 to 3 yellow, 4 and 5 brownish. Cilia of hind femur twice as long as femoral diameter *laciniatus* Coq.
 - Hind tarsus entirely black or with base of tarsomere 1 narrowly yellow. Cilia of hind femur not more than 1 1/3 times as long as femoral diameter 27
27. Fore leg with tarsomere 3 about 2 1/2 times as long as 4. Fore coxa black laterally on basal 1/2 or more *longimanus* Loew
 - Fore leg with tarsomere 3 about 1 1/2 times as long as 4. Fore coxa yellow laterally or darkened only at base 28
28. Hind femur with not more than 10 ventral cilia *splendidulus* Loew
 - Hind femur with at least 20 ventral cilia *splendidus* Loew

³ *D. canadensis*, *genualis* and *indigenus*, with the fore tarsus very slightly modified, run either way.

29. Fore leg with tarsomere $4 \frac{2}{3}$ as long as 5. Hind femur with ventral cilia on basal $\frac{1}{3}$ short but distinct. Hind leg with tarsomeres 2 and 3 dark yellow *dakotensis* Aldrich
 - Fore leg with tarsomere $4 \frac{1}{2}$ as long as 5. Hind femur with ventral cilia absent on about basal $\frac{2}{5}$. Hind leg with tarsomeres 2 and 3 blackish 30
30. Hind femur with ventral cilia very dense and matted on third fourth of its length, much denser than those on apical $\frac{1}{4}$. Hind tibia with posterior bare area extending only very slightly beyond mid length *batillifer* Loew
 - Hind femur with ventral cilia of nearly uniform density on apical $\frac{3}{5}$ of femur. Hind tibia with posterior bare area extending to $\frac{2}{3}$ length of tibia *palaesticus* Loew
31. Fore leg with tarsomeres 4 and 5 slightly depressed, with lateral fringe of short to long stiff black hairs 32
 - Fore leg either with tarsomeres 4 and 5 compressed or with tarsomeres 2 to 5 slightly constricted at base 33
32. Hind tibia with apex black. Hind tarsus entirely black. Cercus thin, shell-like, mostly pale, with a long tapering apex *genualis* v.D.
 - Hind tibia entirely yellow. Tarsomere 1 of hind leg yellow except at apex. Cercus thick, fleshy, orange, blunt apically *scoparius* Loew
33. Fore tarsus at most slightly compressed, with tarsomere 5 little if any deeper than 3 34
 - Fore tarsus strongly compressed, with tarsomere 5 at least twice as deep as 3 37
34. Antenna black with scape yellow below. Mid and hind coxae extensively black laterally. Hind tarsus black 35
 - Antenna yellow with at most first flagellomere darkened apically. Mid and hind coxae yellow. Hind leg with first tarsomere mostly yellow 36
35. Fore leg with tarsomeres 1 and 2 and at least basal half of 3 yellow; 4 and 5 very slightly compressed; 1 to 3 without fine sparse hairs below. Hind tibia with small posterodorsal microtrichose area at mid length *canadensis* v.D.
 - Fore leg with apex of tarsomere 1 and all of 2 to 4 black; 2 to 5 each slightly constricted at base; 1 to 3 with fine sparse ventral hairs about as long as tibial diameter. Hind tibia with posterodorsal microtrichose stripe on most of basal half *indigenus* v.D.
36. Tarsomeres 3 and 4 of fore leg with dorsal fringe of stiff black hairs *sarotes* Loew
 - Tarsomeres 3 and 4 of fore leg without dorsal fringe *terminalis* Loew
37. Fore leg with tarsomere 4 yellow 38
 - Fore leg with tarsomere 4 black or blackish 39

38. Fore leg with tarsomere 5 narrowly white basally, broadest at mid length, and less than 1/2 as long as tarsomere 4. Mid tibia with one ventral bristle
 *nigricornis* Meigen
- Fore leg with tarsomere 5 black, broadest at apex, and about twice as long as tarsomere 4. Mid tibia with three ventral bristles *porphyrops* v.D.
39. Pedicel black 40
- Pedicel yellow on at least lower half 41
40. Fore leg with tarsomere 2 about 3 times as long as 3. Squamal cilia black. Fore coxa yellow with lateral surface blackened at base *blandus* v.D.
- Fore leg with tarsomere 2 about twice as long as 3. Squamal cilia pale. Fore coxa entirely yellow *albicoxa* Aldrich
41. Hind tibia blackish on most or all of apical half. Wing with anal angle prominent but without two lobes in anal area *flagellitenens* Wheeler
- Hind tibia yellow anteriorly, darkened posteriorly near apex. Wing with two prominent lobes, one at end of A₁ and one at anal angle 42
42. Fore leg with tarsomere 3 yellow, tarsomere 4 blackish. Cercus with apical margin evenly rounded *lobatus* Loew
- Fore leg with tarsomeres 3 and 4 blackish, concolorous. Cercus with apical margin emarginate *omnivagus* Loew
43. Hind femur ciliate below 44
- Hind femur not ciliate below 50
44. Pedicel and first flagellomere black 45
- Antenna yellow, at most first flagellomere darkened above 47
45. Mid and hind femora each with two or three preapical bristles
 *trisetosus* v.D.
- Mid and hind femora each with one preapical bristle 46
46. Bend in last section of vein M with stump vein. First flagellomere about 2 1/2 times as long as wide. Frons bluish-black with purple reflections
 *ramifer* Loew
- Bend in last section of vein M without stump vein. First flagellomere scarcely longer than wide. Frons green *incisuralis* Loew
47. Postpronotum with lateral surface mostly yellow. Squamal cilia black. Hind leg with tarsomere 1 pale yellow, not darker than tibia 48
- Postpronotum entirely metallic green. Squamal cilia mostly or entirely yellow. Hind leg with tarsomere 1 black or blackish, much darker than basal half of hind tibia 49
48. Scutellum with lower part of posterior surface, and all of ventral surface, yellow: Hind tibia ventrally with irregular double row of 18-24 unequal setae
 *scapularis* Loew

- Scutellum with posterior surface entirely metallic green, with only ventral surface yellow. Hind tibia ventrally with single row of 9-13 nearly uniform setae *correus* Steyskal
49. Hind femur with ventral cilia about 1 1/2 times as long as femoral diameter. Hind tibia entirely yellow, posterior surface with nearly bare area extending beyond mid length of tibia *variabilis* Loew
- Hind femur with ventral cilia not longer than femoral diameter. Hind tibia with apex black, posterior surface with nearly bare area not extending beyond 2/5 length of tibia *luteipennis* Loew
50. Mid tarsus ornamented 51
- Mid tarsus plain 53
51. Mid leg with tarsomere 1 normal, 2 to 5 strongly compressed. Hind leg with tarsomere 1 yellow with black apex *latipes* Loew
- Mid leg with tarsomere 1 depressed, with short flattened anterior and posterior setae; 2 to 5 normal. Hind leg with tarsomere 1 black, or yellow only at extreme base . . 52
52. Mid tibia nearly twice as long as mid femur, compressed, entirely yellowish. Posterior margin of wing with broad deep rounded emargination between CuA_1 and A_1 *wheeleri* Mel. & Brues
- Mid tibia not more than 1 1/4 times as long as mid femur, depressed, whitish with narrow dorsal dark line. Hind margin of wing with very shallow emargination between CuA_1 and A_1 *plumipes* Scopoli
53. Antenna mostly yellow, at most first flagellomere darkened above. Mid tibia with apex swollen, opalescent *fulvipes* Loew
- Antenna black, at most scape yellow on lower half. Mid tibia slender, not swollen apically 54
54. Hind leg with first tarsomere yellow except at apex. Hind tibia swollen basally, posterior surface of swollen area with a clearly demarked round microtrichose area *virginiensis* v.D.
- Hind leg with tarsomere 1 entirely black. Hind tibia not swollen basally, posteriorly either with uniform small black setae or with an elongate microtrichose or bare area 55
55. Fore leg with tarsomeres 1 and 2 and at least basal half of 3 yellow, paler than 4 and 5 56
- Fore leg with apex of tarsomere 1 and most or all of 2 to 4 darkened, darker than paler part of 1 58
56. Fore leg with tarsomeres 4 and 5 slightly depressed and with short black lateral hairs. Mid tibia without ventral bristle. Scape black. Cercus with slender tapering apex *genualis* v.D.
- Fore leg with tarsomeres 4 and 5 neither depressed nor fringed. Mid tibia with two or three ventral bristles. Scape yellow below. Cercus rounded apically 57

57. Fore leg with tarsomeres 4 and 5 slightly compressed. Hind tibia with small microtrichose area on dorsal part of posterior surface near mid length *canadensis* v.D.
 - Fore leg with tarsomeres not compressed. Hind tibia posteriorly with uniform black setae *brevimanus* Loew
58. Fore coxa black with narrow yellow apex. Scape black 59
 - Fore coxa yellow with at most extreme base of lateral surface blackish. Scape narrowly yellow below 60
59. Anterior margin of wing, in front of R_{4+5} , blackish. Mid tibia without anterior bristles, with one ventral bristle *affluens* v.D.
 - Wing unicolorous. Mid tibia with three anterior bristles and one ventral bristle *sincerus* Mel.
60. Anterior margin of wing, in front of R_{4+5} , brownish. Squamal cilia black. Hind femur blackish above at apex. Hind tibia without microtrichose or bare area on posterior surface, with uniform black setae *discolor* v.D.
 - Wing unicolorous. Squamal cilia mostly or entirely pale. Hind femur entirely yellow. Hind tibia posteriorly with microtrichose or bare area on at least 1/4 of its length 61
61. Fore leg with tarsomeres 2 to 4 each slightly constricted at base; tarsomeres 1 to 3 with fine sparse ventral hairs about as long as tarsal diameter *indigenus* v.D.
 - Fore leg with tarsomeres not constricted basally and without fine ventral hairs 62
62. Fore coxa laterally with small black basal spot. Fore leg with tarsomere 5 black, as dark as 4. Mid tibia with one ventral bristle. Hind tibia with posterior microtrichose stripe on most of basal half *gladius* v.D.
 - Fore coxa entirely yellow. Fore leg with tarsomere 5 yellowish, paler than 4. Mid tibia with one or two ventral bristles. Hind tibia with posterior stripe bare (without minute setae) and restricted to second fourth of tibia *socius* Loew

John Linley

John Linley passed away suddenly on Nov. 19, just as he was finishing a 5 mile race near his home. He was 58 years old. His work was characterized by close attention to small details and provide a model of excellence for those who have studied his numerous publications. John was the editor of the Ceratopogonidae Information Exchange (a yearly newsletter which was circulated worldwide) and he was a touchstone for many of us working on no-see-um biting midges. He was active in a number of societies and ceratopogonid workers have fond memories of meeting under his leadership at the Third International Congress of Dipterology last August. John will be sorely missed by his friends and colleagues!

Did You Know?

The first book devoted solely to microscopic observations dealt with an interpretation of the dipteran eye. It was published by Gioanbatista Hodierna in 1644 in a book entitled L'Occhio della Mosca (The eye of the fly).

Dipterology Captures Public Eye!

As any of you with young children will know, the current rage in North America has been a game called "Pogs", in which small cardboard discs are stacked and then smashed by an opponent who gets to keep all those which flip upside down. Discs come with a variety of logos, scenes and pictures, including, as I noticed while paying for gas at the Ye Olde Salmon Arm Gas Bar, one with a handsome, full colour, therevid! Can this possibly mean a greater awareness by the public of the appeal of our study group? Might this forecast an increase in funding and a massive lay-off of nasty and ignorant administrators?



Books and Publications

For the first time in the history of the Fly Times, I have no striking papers or books to describe which deal solely or mostly with Diptera. Have I missed something?

The following book says little about Diptera (and when it does, it mostly about those unsavoury little chironomids). However, the book provides important information and synthesis about the evolution and dispersal patterns of insects during the Quaternary. It is an valuable source of information for Dipterists attempting to understand present distribution patterns, especially in the northern hemisphere.

Elias, S.A. 1994. Quaternary insects and their environments. Smithsonian Institution Press, Washington and London. xiii + 284 pp.

ROBOTMAN



For those who have not yet sent in a synopsis of their interests for the Directory of North American Dipterists, the following form is provided. Please restrict yourselves to no more than 20 words when listing the titles of your major projects and the animals you work with.

The completed form may be sent to Jeff Cumming at the following address:

Dr. J. M. Cumming,
Centre for Land and Biological
Resources Research,
Agriculture Canada,
K.W. Neatby Building,
Ottawa, Ontario,
K1A 0C6, Canada.

Should any of you like to expand or modify your entries from the last list, use the form to indicate the changes.

Full name: _____

Address: _____

Telephone Number: _____

FAX Number: _____

E-mail: _____

Projects and taxa studied: _____
