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Additions to the Staphylinidae (Coleoptera) of the Cayman Islands

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Additions to the Staphylinidae (Coleoptera) of the Cayman Islands

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Additions to the Staphylinidae (Coleoptera) of the Cayman Islands

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Abstract. In 1947, 20 species of Staphylinidae were reported from the Cayman Islands as a result of an Oxford University expedition there in 1938 which made extensive use of a light trap. The list is here expanded to 62 species based on collections by R. R. Askew, G. E. Ball, E. A. Dilbert, B. K. Dozier, E. J. Gerberg, P. J. Fitzgerald, M. C. Thomas, and R. H. Turnbow since 1970, all of whom also used light traps except for a collection or two by flight intercept trap.

Methods and materials

For genera that have not been revised subsequently for the West Indies or adjacent areas, identification in this list relies, except where noted, on descriptions and keys provided by Blackwelder (1943). Claims of new records for the Cayman Islands are based on the list of 20 species provided by Blackwelder (1947) and another species recorded by Smetana (1993). Pselaphinae were not considered as Staphylinidae by Blackwelder (1943, 1947), nor by Park et al. (1976) who reported the West Indian 'Pselaphidae' without records from the Cayman Islands.

Specimens are housed in the Florida State Collection of Arthropods (FSCA), and R. H. Turnbow's personal collection (RHTC), and representative examples will be deposited in the collection of the Cayman Islands Department of Environment, George Town, Grand Cayman. Donald S. Chandler identified the pselaphines, Jan Klimaszewski the *Adinopsis* Cameron and *Myllaena* Erichson, and J.H. Frank the remainder. A checklist is provided in Table 1.

Systematic list and records

SUBFAMILY PSELAPHINAE

Park et al. (1976) was the primary reference used for generic placement, and the species placed only to genus could not be identified using the keys to species in that paper.

near *Actiastes* sp. Cayman Brac, Hemmington Rd. + Songbird Dr. (FSCA; RHTC); Major Donald Dr., .6 km. E jct. Ashton Reid Dr. (FSCA; RHTC).

Biblomimus sp. Grand Cayman, Mastic Trail S. trailhead (RHTC).

Table 1. Checklist of the Staphylinidae of the Cayman Islands. An asterisk [*] indicates new records, but only those for which a name or tentative name is available.

SUBFAMILY PSELAPHINAE		
1. near <i>Actiastes</i> sp.*	30. <i>Apocellus ustulatus</i> Erichson*	
2. <i>Biblomimus</i> sp.*	31. <i>Bledius jamaicensis</i> Blackwelder*	
3. <i>Decarthron</i> sp.*	32. <i>Bledius mandibularis</i> Erichson	
4. near <i>Euplectus</i> sp.*	33. <i>Bledius punctatissimus</i> LeConte	
5. <i>Jubus</i> sp.*	34. <i>Carpelimus aridus</i> (DuVal)*	
6. <i>Nisaxis tomentosa</i> (Aubé)*	35. <i>Carpelimus chapini</i> Blackwelder	
7. Trimiina genus?	36. <i>Carpelimus correctus</i> Blackwelder	
SUBFAMILY TACHYPORINAE		
8. <i>Bryoporus</i> cf. <i>bicolor</i> Blackwelder*	37. <i>Carpelimus dissonus</i> (Bierig)	
9. <i>Bryoporus</i> cf. <i>regulus</i> Blackwelder*	38. <i>Carpelimus</i> cf. <i>phaios</i> Blackwelder*	
10. <i>Coproporus pulchellus</i> (Erichson)*	39. <i>Carpelimus sordidus</i> (Cameron)	
SUBFAMILY ALEOCHARINAE		
11. <i>Adinopsis myllaenoides</i> (Kraatz)*	40. <i>Oxytelus incisus</i> Motschulsky*	
12. <i>Atheta guatemalae</i> Bernh. & Scheerp.	SUBFAMILY PAEDERINAE	
13. <i>Coenonica puncticollis</i> Kraatz*	41. <i>Astenus cubensis</i> Blackwelder*	
14. <i>Euvira</i> sp.*	43. <i>Homaeotarsus albipes</i> (Erichson)	
15. <i>Holobus chrysopygus</i> (Kraatz)*	44. <i>Homaeotarsus solus</i> Blackwelder*	
16. <i>Myllaena currax</i> Notman*	45. <i>Lithocharis sororcula</i> Blackwelder*	
17. <i>Myllaena insipiens</i> Casey*	46. <i>Lobrathium odium</i> Blackwelder	
18. <i>Oligota parva</i> Kraatz*	47. <i>Palaminus</i> sp.	
19. <i>Oxypoda</i> sp.*	48. <i>Pinophilus flavipes</i> Erichson	
20. <i>Phanerota</i> sp.*	49. <i>Pinophilus schwarzi</i> Blackwelder.	
21. aleocharine sp. A	50. <i>Scopaeus</i> cf. <i>antennalis</i> Cameron*	
22. aleocharine sp. B	51. <i>Scopaeus</i> cf. <i>pygmaeus</i> Erichson*	
23. aleocharine sp. C	52. <i>Scopaeus rambouseki</i> (Bierig)*	
24. aleocharine sp. D	53. <i>Scopaeus</i> cf. <i>rulomus</i> Sharp*	
25. aleocharine sp. E	54. <i>Stammoderus labeo</i> (Erichson)	
26. aleocharine sp. F	55. <i>Sunius debilicornis</i> (Wollaston)	
SUBFAMILY OSORINAE		
27. <i>Holotrochus minor</i> (Fauvel)*	SUBFAMILY STAPHYLININAE	
28. <i>Osorius lewisi</i> Blackwelder	56. <i>Belonuchus gagates</i> Erichson*	
SUBFAMILY OXYTELINAE		
29. <i>Anotylus insignitus</i> (Gravenhorst)*	57. <i>Diochus nanus</i> Erichson*	
	58. <i>Neobisnius humilis</i> Erichson*	
	59. <i>Philonthus alumnus</i> Erichson	
	60. <i>Philonthus havaniensis</i> (Laporte)	
	61. <i>Philonthus rufulus</i> Horn*	
	62. <i>Philonthus ventralis</i> (Gravenhorst)	

Decarthron sp. Cayman Brac, Major Donald Dr. at Bight Rd., Brac Parrot Reserve (FSCA); Major Donald Dr., .6 km. E jct. Ashton Reid Dr. (RHTC).

near *Euplectus* sp. Cayman Brac, The Creek (FSCA).

Jubus sp. Cayman Brac, Hemmington Rd. + Songbird Dr. (RHTC); Major Donald Dr., .6 km. E jct. Ashton Reid Dr. (FSCA; RHTC).

Nisaxis tomentosa (Aubé). Grand Cayman, Mastic Trail S. trailhead (FSCA; RHTC); Queen Elizabeth Botanical Garden (FSCA; RHTC).

Trimiina genus? Cayman Brac, Major Donald Dr. at Bight Rd. (RHTC).

SUBFAMILY TACHYPORINAE

Bryoporus cf. *bicolor* Blackwelder. Cayman Brac, Hemmington Rd., 8-VI-2008, M.C. Thomas, R.H. Turnbow, B.K. Dozier, blacklight trap (1 ex.), Hemmington Rd., bl trap, 7 June 2008, Thomas & Turn-

bow (1 ex.). The species was described from Hispaniola and is known only from the Dominican Republic (Blackwelder 1943). Korge (1962) provided no new records for *B. bicolor*.

Bryoporus cf. *regulus* Blackwelder. Grand Cayman, Mastic Trail S FIT, 20-29 May 2009, R. Turnbow (16 exx.). *Bryoporus regulus* was described from Hispaniola and is reported only from the Dominican Republic and Haiti by Blackwelder (1943). Korge (1962) provided no new records for *B. regulus*.

Coproporus pulchellus (Erichson). Grand Cayman, 10-IX-1989, P. Fitzgerald, blacklight trap (1 ex.), Cayman Brac Creek, 27-XII-1995 coll. E.A. Dilbert blacklight trap (1 ex.). This species is widely distributed in the West Indies, including Cuba and Jamaica (Blackwelder 1943).

SUBFAMILY ALEOCHARINAE

Adinopsis myllaenoides (Kraatz). Grand Cayman, 19-III-1989, P. Fitzgerald blacklight trap (1 ex.), Bodden Town at light, 1.3.2009 R.R. Askew (1 ex. in gelatin capsule). Mastic trailhead S bl trap 21 May 2009, Thomas Turnbow & Ball (1 ex.). The distribution of this species is recorded by Klimaszewski (1979), expanded in some of that author's later publication.

Atheta guatemalae Bernhauer & Scheerpeltz. Reported from the Cayman Islands by Blackwelder (1947) but not represented in the material here reported.

Coenonica puncticollis Kraatz. Cayman Brac, Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap, 25 May 2009, Thomas, Turnbow & Ball (1 ex.). This Asian species had been known for Grenada and St. Vincent in the Lesser Antilles (Blackwelder 1943). It was reported from Florida (USA) and Jamaica by Frank and Thomas (1984) with illustrations.

Euvira sp. Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (1 ex.).

Holobus chrysopygus (Kraatz). Cayman Brac, The Creek, 23-XII-1995, E.A. Dilbert, blacklight trap (1 ex., in alcohol), Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap, 22 May 2009, Thomas, Turnbow & Ball (1 ex.), Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (1 ex.). This Old World species, reported under the name *Oligota chrysopyga*, is known from Grenada and Jamaica in the West Indies (Frank 1972).

Myllaena currax Notman. Grand Cayman, 19-III-1989, P Fitzgerald, blacklight trap (1 male), Queen Elizabeth Botanic Garden, 9-VI-2008, MC Thomas, RH Turnbow, BK Dozier, blacklight trap (1 female); Queen Elizabeth Botanic Garden, bl trap, 8 June 2008, Thomas & Turnbow (1 male), Mastic Trail S, FIT, 20-29 May 2009, R Turnbow (1 female, 3 males).

Myllaena insipiens Casey. Grand Cayman, 7 mi N Sand Bluff, 20 May 2009, R. Turnbow (2 females). This and the species named above are both known for Florida (Klimaszewski 1982).

Oligota parva Kraatz. Grand Cayman, Mastic Trail S FIT 20-29 May 2009, R. Turnbow (1 ex.) This Old World species is known from Cuba, Grenada, Jamaica, St. Vincent, and the US Virgin Islands in the West Indies (Frank 1972).

Oxypoda sp. Grand Cayman, Mastic Trail S FIT, 20-29 May 2009, R. Turnbow (1 ex.), Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (2 exx.), Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap, 25 May 2009, Thomas, Turnbow & Ball (1 ex.).

Phanerota sp. Grand Cayman, 9-IX-1990, P. Fitzgerald blacklight trap, Grand Cayman, Mastic Trail, 28 May 2009, R. Turnbow (7 exx.), Mastic Trail S FIT, 20-29 May 2009, R. Turnbow (4 ex.), Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (51

exx.), Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap, 23 May 2009, Thomas, Turnbow & Ball (12 exx.), Bight Rd., Brac Parrot Pres. 24-V-2009, Thomas, Turnbow & Ball, blacklight trap (2 exx.), Hemmington Rd., M.C. Thomas, R.H. Turnbow, B.K. Dozier, blacklight trap (1 ex.). Blackwelder (1943) listed 22 species of subtribe Gyrophaenina (all as *Gyrophaena*) from the West Indies, but none from the Cayman Islands. There is no key to the identification of these species, at least some of which will doubtless be found to belong to *Phanerota* rather than *Gyrophaena*.

Zyras sp. A specimen of this genus was reported from Grand Cayman by Blackwelder (1947). True members of the genus *Zyras* are not known from the West Indies (Hlaváč and Jászay 2009), so the specimen probably belongs to some other genus.

Genera and species unknown. Blackwelder (1943) provided neither keys nor illustrations of West Indian Aleocharinae. JHF is unable even to provide a reliable generic name for the six unidentified species listed below:

Species A. Grand Cayman, Mastic Trail S FIT, 20-29 May 2009, R. Turnbow (3 exx.).

Species B. Grand Cayman, Mastic Trail S FIT, 20-29 May 2009, R. Turnbow (1 ex.).

Species C. Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 5 June 2008, Thomas & Turnbow (2 exx.), same but 6 June (1 ex.), same but 7 June (6 exx.), Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap, 22 May 2009, Thomas, Turnbow & Ball (1 ex.).

Species D. Grand Cayman, Mastic Trail S FIT, 20-29 May 2009, R. Turnbow (2 exx.).

Species E. Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (1 ex.).

Species F. Cayman Brac, north shore bluff 24 May 2009, R. Turnbow (1 ex.).

SUBFAMILY OSORIINAE

Holotrochus minor (Fauvel). Grand Cayman, Mastic Trail S FIT 20-29 May 2009, R. Turnbow (24 exx.). This species was reported for Cuba and Jamaica by Blackwelder (1943).

Osorius lewisi Blackwelder. Grand Cayman, George Town, 23-II-1984, Coll. E. Gerberg, at light (2 exx.), 10-IX-1989, P. Fitzgerald blacklight trap, (3 exx.), same but 18-IX-1990 (1 ex.), same but 30-IX-1990 (1 ex.), same but 1-IX-1992 (1 ex.), same but 26-IV-1992 16233 (3 exx.), same but 14-VII-1992 16238 (1 ex.), same but 14-XI-1992 16239 (1 ex.), Queen Elizabeth Botanic Garden 4-VI-2008 M.C. Thomas, R.H.



Figure 1. Adult of *Osorius lewisi* Blackwelder, 2.8 mm, the only staphylinid currently believed to be preinictive (“endemic”) to the Cayman Islands. Photo by Lyle Buss.

Turnbow, B.K. Dozier blacklight trap (6 exx.), Queen Elizabeth Botanic Garden 21-V-2009 Thomas, Turnbow & Ball blacklight trap (2 exx.), Mastic Trail, S. Trailhead, 28-V-2009, Thomas, Turnbow and Ball blacklight trap (1 ex.), Mastic Trail S FIT 20-29 May 2009, R. Turnbow (1 ex.), Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 5 June 2008, Thomas & Turnbow (6 exx.). This species (Fig. 1) was described by Blackwelder from specimens collected on Grand Cayman in 1938 and is now known additionally from Cayman Brac, but nowhere else, and it is the only staphylinid yet known to be precinctive (“endemic”) in the Cayman Islands.

SUBFAMILY OXYTELINAE

Anotylus insignitus (Gravenhorst) Grand Cayman, 28-VII-1990, P. Fitzgerald, blacklight trap (3 exx.), same but 4-VIII-1990 (2 exx.), Cayman Brac, The Creek, 27-XII-1995 coll. E.A. Dilbert blacklight trap (1 ex.), Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (4 exx.). This species is widespread in the West Indies and neighboring areas.

Apocellus ustulatus Erichson Grand Cayman, 23-V-1988 coll. P. Fitzgerald blacklight trap (1 ex.). This species is known from the Virgin Islands and Lesser Antilles (Blackwelder 1943).

Bledius jamaicensis Blackwelder. Cayman Brac Brac Paradise Subdivision, bl trap 22 May 2009 Thomas, Turnbow and Ball (1 ex.). This specimen agrees with the description of *B. jamaicensis*, which was reported only for Santa Cruz, Trinityville and Troy, in the parish of St. Elizabeth in central Jamaica by Blackwelder (1943).

Bledius mandibularis Erichson. Little Cayman, .3 km SE Spot Bay, bl trap, 26 May 2009, Thomas, Turnbow & Ball (1 ex.), Little Cayman, North Coast Rd., .1 km. W jct. Olivine Kirk Rd., bl trap 26-V-2009, Thomas, Turnbow & Ball. Blacklight trap (1 ex.). Reported by Blackwelder (1947) from Little Cayman but not the other islands. Very large numbers of specimens were attracted to light by the Oxford University expedition in 1938. Blackwelder (1947) remarked on this North American species being found in the Cayman Islands and attributed the occurrence to “introduction.” We question the method of arrival (there is no evidence that it was due to human intervention) and prefer to designate *B. mandibularis* as an adventive species on Little Cayman, with the word “adventive” meaning simply that it arrived somehow.

Bledius punctatissimus LeConte. This was reported by Blackwelder (1947) under the name *Bledius esposus* Blackwelder from Little Cayman but was not present in the material examined. The synonymy was established by Herman (1972) who reported the species’ wider distribution.

Carpelimus aridus (DuVal). Grand Cayman, 28-VII-1990, coll. P. Fitzgerald blacklight trap (1 ex.), same but 12-VIII (2 exx.), same but VI-1992 (1 ex.), Queen Elizabeth Botanic Garden bl trap, 8 June 2008 Thomas & Turnbow (1 ex.), George Town UCCI bl trap, 2 June 2008, Thomas & Turnbow (1 ex.), Little Cayman, North Coast Rd., .1 km W jct. Olivine Kirk Rd., bl trap, 27 May 2009, Thomas, Turnbow & Ball (1 ex.). This species was reported for Cuba and Jamaica by Blackwelder (1943).

Carpelimus chapini Blackwelder. This was reported by Blackwelder (1947) from Grand Cayman but does not seem to be present in the material examined.

Carpelimus correctus Blackwelder. Grand Cayman, 9-IX-1990, P. Fitzgerald, blacklight trap (2 exx.), Queen Elizabeth Botanic Garden, bl trap, 8 June 2008, Thomas & Turnbow (7 exx.), Mastic Trail, S. Trailhead, 28-V-2009, Thomas, Turnbow and Ball blacklight trap (1 ex.), George Town UCCI bl trap, 2 June 2008, Thomas & Turnbow (2 exx.), Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (1 ex.). This was reported by Blackwelder (1947).

Carpelimus dissonus (Bierig). This was reported by Blackwelder (1947) from Little Cayman but was not present in the material examined.

Carpelimus cf. *phaios* Blackwelder. Grand Cayman 11-VII-1987, P. Fitzgerald blacklight trap (1 ex), same but 10-I-1990 (1 ex.), same but 12-VIII-1990 (1 ex.), same but 9-IX-1990 (8 exx.), same but VI-1992 (3 exx.), Bodden Town at light, 1.3.2009 R.R. Askew (6 exx. in gelatin capsule), Queen Elizabeth Botanic Garden, bl trap, 8 June 2008, Thomas & Turnbow (15 exx.), Mastic Trail S FIT 20-29 May 2009 R. Turnbow (7 exx), vic. Gun Bay bl trap, 4 June 2008 Thomas & Turnbow (1 ex.), George Town, UCCI bl trap, 2 June 2008 Thomas & Turnbow (22 exx.), Cayman Brac Paradise Subdivision bl trap, 22 May 2009 Thomas, Turnbow & Ball (7 exx.), Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (9 exx.), Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap, 25 May 2009, Thomas, Turnbow & Ball (1 ex.). We had expected to find *C. chapini* and/or *C. dissonus*, but instead found these specimens which key to *C. phaios* in Blackwelder (1943); it was described from Jamaica and is known also from Cuba.

Carpelimus sordidus (Cameron). Grand Cayman, 9-IX-1990, P. Fitzgerald, blacklight trap (2 exx.), Bodden Town at light, 1.3.2009 R.R. Askew (1 ex. in gelatin capsule), Queen Elizabeth Botanic Garden, bl trap, 8 June 2008, Thomas & Turnbow (2 exx.), Mastic Trailhead S. trailhead, bl trap 21 May 2009, Thomas, Turnbow & Ball (7 exx.), Little Cayman, .3 km SE Spot Bay, bl trap, 26 May 2009, Thomas, Turnbow & Ball (2 exx.), Little Cayman, North Coast Rd., .1 km W jct. Olivine Kirk Rd., bl trap, 27 May 2009, Thomas, Turnbow & Ball (2 exx.), Cayman Brac, Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap, 25 May 2009, Thomas, Turnbow & Ball (1 ex.). This species was reported by Blackwelder (1947) from Grand Cayman.

Carpelimus sp. No details were given for this one unidentified specimen by Blackwelder (1947) so it is ignored in this work. There seem to be six named species of *Carpelimus* from the Cayman Islands.

Oxytelus incisus Motschulsky. Grand Cayman, 10-IX-1989, P. Fitzgerald, blacklight trap (2 exx.), same but 1-IV-1990 (1 ex.), same but 26-VII-1990 (2 exx.). This species is widespread in the West Indies and neighboring areas. An adult is illustrated by Frank and Thomas (1981).

SUBFAMILY PAEDERINAE

Astenus cubensis Blackwelder. Cayman Brac, The Creek, 4-XI-1995 coll. E.A. Dilbert blacklight trap (1 ex.), Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (1 ex.), Bight Rd., Brac Parrot Pres. 25-V-2009, Thomas, Turnbow & Ball, blacklight trap (3 exx.), Maj. Donald Dr., 4 km E. jct. Bluff Rd. 23-V-2009, Thomas, Turnbow and Ball blacklight trap (1 ex.). This species was described from Cuba by Blackwelder (1943) and is unknown elsewhere.

Homaeotarsus albipes (Erichson). Grand Cayman, Mastic Trailhead S bl trap 21 May 2009 Thomas, Turnbow & Ball (1 ex.), Queen Elizabeth Botanic Garden 4-VI-2008 M.C. Thomas, R.H. Turnbow, B.K. Dozier blacklight trap (1 ex.), Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 5 June 2008, Thomas & Turnbow (1 ex.), Bight Rd., Brac Parrot Pres. 25-V-2009, Thomas, Turnbow & Ball, blacklight trap (1 ex.). This species is widespread in the Greater Antilles and was reported from Grand Cayman by Blackwelder (1947).

Homaeotarsus solus Blackwelder. Grand Cayman, Queen Elizabeth Botanic Garden 21-V-2009, Thomas, Turnbow & Ball blacklight trap (1 ex), Mastic Trailhead S bl trap 21 May 2009 Thomas, Turnbow & Ball (1 ex.), Mastic Trail, S. Trailhead, 28-V-2009, Thomas, Turnbow and Ball blacklight trap (2 exx.), Queen Elizabeth Botanic Garden bl trap, 8 June 2008 Thomas & Turnbow (1 ex.), Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 5 June 2008 Thomas & Turnbow (1 ex.). This species was described from Cuba, and it is also known from Jamaica and Hispaniola (Blackwelder 1943).

Lithocharis sororcula Blackwelder. Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 7 June 2008, Thomas & Turnbow (11 males), Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap 22 May 2009, Thomas, Turnbow & Ball (1 male.). It is likely that the 27 females in the same two trap samples belong to the same species. Four females caught on Grand Cayman in an ultraviolet light

trap, P. Fitzgerald, one each on 28-VII-1990, 4-VIII-1990, 23-IX-1990, 7-X-1990, may or may not belong to the same species (it is the males that offer easy diagnostic characters). This Asian species is known from Jamaica and West Indian islands to the East (Blackwelder 1943).

Lobrathium odium Blackwelder. Grand Cayman, 19-VIII-1990, P. Fitzgerald, blacklight trap (2 exx.), same but VI-1992 (6 exx.), Mastic Trailhead S bl trap 21 May 2009 Thomas, Turnbow & Ball (4 exx.), Queen Elizabeth Botanic Garden 4-VI-2008 M.C. Thomas, R.H. Turnbow, B.K. Dozier blacklight trap (1 ex.), Queen Elizabeth Botanic Garden, bl trap, 8 June 2008, Thomas & Turnbow (3 exx.), Bodden Town, at light, 1.3.2009, RRA (1 ex.), Little Cayman, North Coast Rd., .1 km. W jct. Olivine Kirk Rd., bl trap 26-V-2009, Thomas, Turnbow & Ball blacklight trap (1 ex.), same but 27 May 2009 (1 ex.). This species was reported for Grand Cayman by Blackwelder (1947).

Palaminus sp. Grand Cayman, Queen Elizabeth Botanic Garden, bl trap, 8 June 2008, Thomas & Turnbow (1 ex.). Four authors contributed descriptions of 19 West Indian species of *Palaminus* in the early decades of the 20th century. These were noted but not revised by Blackwelder (1943). Nobody has yet undertaken a revision, so the species remain unidentifiable with certainty. Blackwelder (1947) reported one specimen of an unidentified *Palaminus* collected by the Oxford University expedition in 1938 to Grand Cayman.

Pinophilus flavipes Erichson. Grand Cayman, Queen Elizabeth Botanic Garden 4-VI-2008 M.C. Thomas, R.H. Turnbow, B.K. Dozier, blacklight trap (2 exx.), Cayman Brac, Major Donald Dr., .6 km. E jct. Ashton Reid Dr., bl trap, 5 June 2008 Thomas & Turnbow (1 ex.). This species was reported for Grand Cayman by Blackwelder (1947).

Pinophilus schwarzi Blackwelder. Grand Cayman, 8-VII-1990, P. Fitzgerald blacklight trap (1 ex.), same but 1-XI-1992 (1 ex.), Queen Elizabeth Botanic Garden bl trap, 8 June 2008 Thomas & Turnbow (4 exx.), Queen Elizabeth Botanic Garden 21-V-2009, Thomas, Turnbow & Ball blacklight trap (1 ex.), Mastic Trailhead S bl trap 21 July 2009 Thomas, Turnbow & Ball (12 exx.). This species was reported for Grand Cayman by Blackwelder (1947).

Scopaeus cf. *antennalis* Cameron. Grand Cayman, Queen Elizabeth Botanic Garden bl trap, 8 June 2008 Thomas & Turnbow (2 exx.). The two female specimens key to *S. antennalis* in Blackwelder (1943), a species described from Haiti and known from Cuba and islands to the East. Lack of male specimens makes the use of diagnostic characters of their abdominal sternites unavailable.

Scopaeus cf. *pygmaeus* Erichson. Grand Cayman, Mastic Trailhead S bl trap, 21 May 2009, Thomas Turnbow & Ball (2 exx.), George Town, UCCI bl trap, 2 June 2008, Thomas & Turnbow (2 exx.), Queen Elizabeth Botanic Garden, bl trap, 8 June 2008, Thomas & Turnbow (2 exx.). The specimens key to *S. pygmaeus* in Blackwelder (1943), but a revisionary study is necessary to make sure of the identification.

Scopaeus rambouseki (Bierig). Grand Cayman, Queen Elizabeth Botanic Garden bl trap, 8 June 2008, Thomas & Turnbow (1 ex.), Queen Elizabeth Botanic Garden 9-VI-2008, M.C. Thomas, R.H. Turnbow, B.K. Dozier blacklight trap (1 ex.), Mastic Trailhead S bl trap, 21 May 2009, Thomas Turnbow & Ball (2 exx.). The four specimens key to *Scopaeus rambouseki* in Blackwelder (1943) and the characters of the male agree with those illustrated for that Cuban species by Bierig (1934).

Scopaeus cf. *rulomus* Sharp. Grand Cayman, Bodden Town, at light, 1.3.2009, RRA (2 exx. on one card mount), Grand Cayman, 4-VI-2009 coll. P. Fitzgerald blacklight trap (1 ex.), same but 1-IX-1989 (1 ex.), same but 23-IX-1990 (1 ex.), same but VI-1992 (1 ex.), Mastic Trail S FIT 20-29 May 2009, R. Turnbow (3 exx.), Mastic Trailhead S bl trap 21 May 2009, Thomas Turnbow & Ball (1 ex.), George Town UCCI bl trap 8 June 2008 Thomas & Turnbow (1 ex.), Queen Elizabeth Botanic Garden bl trap 8 June 2008 (5 exx.), Little Cayman North Coast Rd., .1 km. W jct. Olivine Kirk Rd., bl trap 27 May 2009, Thomas, Turnbow & Ball (1 ex.), Cayman Brac Creek, 27-XII-1995 coll. E.A. Dilbert blacklight trap (1 ex.). The specimens key to *S. rulomus* in Blackwelder (1943), but a revisionary study is necessary to make sure

of the identification.

Scopaeus sp. Blackwelder (1947) reported a single unidentified *Scopaeus* specimen collected by the Oxford University expedition in 1938. Because it is likely to belong to one of the four species listed above, we attribute four (not five) species of *Scopaeus* to the Cayman Islands.

Stannoderus labeo (Erichson). Grand Cayman, Queen Elizabeth Botanic Garden, bl trap, 8 June 2008, Thomas & Turnbow (1 ex.). This West Indian species was reported for Grand Cayman by Blackwelder (1947).

Sunius debilicornis (Wollaston). Grand Cayman, 12-VIII-1990, P. Fitzgerald, blacklight trap (1 ex.). This Old World species was reported for Grand Cayman by Blackwelder (1947).

SUBFAMILY STAPHYLININAE

Belonuchus gagates Erichson. Cayman Brac, The Creek, 18-XI-1995 coll. E.A. Dilbert blacklight trap (1 ex.), Cayman Brac, jct. Hemmington Rd. + Songbird Dr., bl trap, 7 June 2008 Thomas & Turnbow (5 exx.), same but 6 June 2008 (1 ex.), Cayman Brac, Bight Rd., Brac Parrot Pres. 24-V-2009, Thomas, Turnbow & Ball, blacklight trap (2 exx.). This species occurs in Puerto Rico, Hispaniola, Cuba and Jamaica (Blackwelder 1943). See Smetana (1995) for illustrations and diagnosis of *B. gagates*, and Smetana (1991) for differentiation of *B. minax* Erichson.

Diochus nanus Erichson. Grand Cayman, Mastic Trail S FIT, 20-29 May 2009 R. Turnbow (7 exx.), Grand Cayman south end, Mastic Trail 20-28-V-2009, Coll. M.C. Thomas, Lindgren funnel trap baited with manuka oil (1 ex.). Cayman Brac, Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap 22 May 2009, Thomas, Turnbow & Ball (1 ex.). Blackwelder (1943) regarded the North American *D. schaumii* Kraatz, 1860, as a synonym of the South American *D. nanus* Erichson, 1839, and he reported the latter as widespread in the West Indies. Smetana (1977) illustrated male genitalia of *D. schaumii* and *D. nanus* and showed two distinct species.

Neobisnius humilis Erichson. Grand Cayman, 4-VIII-1990, P. Fitzgerald blacklight trap (1 ex.), same but 12-VIII-1990 (1 ex.), Cayman Brac, Major Donald Dr.; .4 km E jct. Ashton Reid Dr., bl trap 25 May 2009, Thomas, Turnbow & Ball (1 ex.). The wider distribution of this species in the West Indies was reported by Frank (1981).

Philonthus alumnus Erichson. Grand Cayman, 10-II-1990, P. Fitzgerald, blacklight trap (2 exx.), same but 21-VII-1990 (4 exx.), same but 26-VII (2 exx.), same but 28-VII (1 ex.), same but 4-VIII (3 exx.), same but 12-VIII (1 ex.), same but 19-VIII (1 ex.), same but VI-1992 (6 exx.), Bodden Town at light, 1.3.2009 R.R. Askew (1 ex. in gelatin capsule), Grand Cayman Is., George Town, 30 Mar 1973, E.J. Gerberg, BL (3 exx.), Grand Cayman, Mastic Trail, S. trailhead, 28-V-2009, Thomas, Turnbow & Ball blacklight trap (2 exx.), Mastic Trailhead S. trailhead, bl trap 21 May 2009, Thomas, Turnbow & Ball (4 exx.), Grand Cayman, vic. Gun Bay blacklight trap, 3 June 2008 M.C. Thomas, R.H. Turnbow, B.K. Dozier (2 exx.), similar but 4 June 2008 Thomas & Turnbow (1 ex.), Grand Cayman, Queen Elizabeth Botanic Garden, bl trap, 8 June 2008, Thomas & Turnbow (10 exx.), Cayman Brac, Brac Paradise Subdivision, bl trap, 5 June 2008, Thomas & Turnbow (1 ex.), Major Donald Dr., .4 km E jct. Ashton Reid Dr., bl trap, 25 May 2009, Thomas, Turnbow & Ball (2 exx.). This species was redescribed, illustrated and reported from the Cayman Islands, Cuba, Haiti, and Puerto Rico by Smetana (1993). The aedeagal apex is rounded, illustrated by Smetana (1993).

Philonthus havaniensis (Laporte). This was reported from Grand Cayman by Blackwelder (1947) but was not present in the material examined.

Philonthus rufulus Horn. Grand Cayman, George Town, UCCI, at light, 8 June 2008, R. Turnbow (9 exx.), Little Cayman, .3 km SE Spot Bay, bl trap, 26 May 2009, Thomas, Turnbow & Ball (2 exx.), North Coast Rd., .1 km. W jct. Olivine Kirk Rd., bl trap 26-V-2009, Thomas, Turnbow & Ball. Black-

light trap (1 ex.), similar but 27 May 2009 (1 ex.). This species has a wide distribution in the southern USA, and is known from the Bahamas and Cuba (Smetana 1995) but has not been reported for the Cayman Islands. The aedeagus has an acuminate apex as illustrated by Smetana (1995). This finding of an adventive North American species in the Cayman Islands is similar to the finding of *Bledius mandibularis* on Little Cayman. The assignment of female specimens and of undissected males in the examined material of *P. alumnus* and *P. rufulus* is extremely tentative and could easily be incorrect: the fact remains that *P. alumnus* is demonstrated to occur on Grand Cayman and Cayman Brac, and *P. rufulus* is demonstrated to occur on Grand Cayman and Little Cayman.

Philonthus ventralis (Gravenhorst). This was reported from Grand Cayman by Blackwelder (1947) but was not present in the material examined.

Discussion

All collections here evaluated were made by ultraviolet light trap (UV trap, or, as on specimen labels, "blacklight trap" or "bl trap") or flight intercept trap (FIT on specimen labels). More diverse collecting methods might have yielded specimens of many more species. Blackwelder (1947) predicted that the eventual total would be at least 50 species, and he regretted that the 1938 Oxford University expedition used only a light trap. That prediction has proved to be correct, yet still more species should be detected when more diverse collecting methods are used. None of us was able to participate in the collecting expeditions.

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