

AUSTRALIAN CARABID BEETLES IV. LIST OF LOCALITIES, 1956-1958¹

By P. J. DARLINGTON, JR.

Museum of Comparative Zoology, Cambridge, Mass.

This is a brief account, with list of localities, of a collecting trip that I made to Australia from December 1956 to June 1958. My wife and fourteen year old son accompanied me. My own travel expenses were paid in part by a fellowship of the John Simon Guggenheim Memorial Foundation. My purpose was to collect carabid beetles in the wetter forests of the whole eastern edge of Australia, from southern Tasmania to northern Cape York. The present paper summarizes our itinerary and then lists the localities at which Carabidae were obtained. I had collected at some of these localities previously, in 1931-1932, as a member of the Harvard Australian Expedition.

We reached Sydney December 2, 1956, and proceeded to Tasmania December 7. We bought a used (and abused) Volkswagen pickup truck in Hobart and traveled and lived in it most of the time thereafter.

We stayed in Tasmania until April 5, 1957. Collecting was done mostly in the wetter forests there; first into the accessible edges of the almost impenetrable southwestern forest (Arve River, Hartz Mountain, Mt. Field, Florentine River, Zeehan, etc., and later Corinna); then in mountainous north-central Tasmania (Lake St. Clair, Waldheim and Cradle Mt., Great Lake, Waratah, etc.); and finally on isolated mountains and plateaus in the northeast (Mt. Ben Lomond, Blue Tier, Mt. Barrow, etc.). Although the most extensive wet forests are in the south and west, we found some of the finest stands of *Nothofagus* (southern beech) on and near the Blue Tier in northeastern Tasmania. Lake St. Clair was the best (most diverse and richest) Tasmanian locality visited. The most southern locality reached was Cockle Creek, about 5 miles from the southernmost tip of land.

On the mainland of Australia, beginning in April, 1957, we worked the Otway Ranges southwest of Melbourne, then crossed the mountains via Mt. Hotham and Omeo to Canberra, which we reached May 1, and where we made winter quarters in a rented house.

¹Published with the aid of a grant from the Museum of Comparative Zoology at Harvard College.

At Canberra I studied the types of Australian Carabidae in the Sloane Collection, now in care of the Commonwealth Scientific and Industrial Research Organization. During this time we collected repeatedly on the Brindabella Range west of Canberra, briefly on the lower slopes of Mt. Kosciusco, and at other places within reach.

From Canberra, starting September 1, 1957, we crossed by the Sturt Highway to Adelaide, where I examined Sloane's and Lea's Tasmanian carabid types. We then followed the coast south, east, and north, via Melbourne, to Sydney, making side trips to collect on Mt. Baw Baw, Wilsons Promontory, etc.

From Sydney, October 15, 1957, we started a long zig-zag through northern New South Wales, going west almost to Nyngan, back to the Mt. Royal Range (incl. Barrington Tops), and north via the Comboyne, the Dorrigo-Ebor plateau (including New England National Park and Point Lookout, a magnificent, mile-high collecting place), Armidale, and a series of localities across extreme northern New South Wales, to Brisbane in Queensland.

We reached Brisbane November 12, 1957, and left on the 16th for North Queensland. Going north, we worked (among other places) the Eungella Range (an important, isolated rain forest locality inland from Mackay), and Mt. Spec, Mt. Fox, and the Kirrama Range. We reached Cairns December 6.

From Cairns, we began work on the Atherton Tableland, in the largest and richest tropical rain forest area in Australia. We found the ground at Kuranda too dry, so moved our headquarters to Atherton and collected thereabouts, especially on the Dividing Range south and west of the town. December 13-16, 1957, we camped and collected on Mt. Bartle Frere. December 20, we returned to Cairns, and in the next few days did Thornton Peak (Mt. Alexandra) northeast of Daintree and Mt. Lewis southwest of Mossman. From December 31, 1957 to January 3, 1958, I collected alone on Mt. Bellenden Ker.

On January 7, 1958, we flew to Thursday Island and crossed to the tip-of-peninsular forests of Cape York, collecting at Bamaga and Lockerbie until the 20th. From Lockerbie we worked to within 10 miles of the northern tip of continental Australia. My son and I interrupted the return flight at Iron Range for a week's collecting, including a side trip on foot to Tozer Gap.

We spent most of February, 1958, on the Atherton Tableland, where, however, collecting was hampered by continual heavy rain.

From late February until March 13 we were moving south, re-visiting the Kirrama Range and Mt. Spec, and reaching two additional, important localities: the isolated rain forest on the Elliot Range southeast of Townsville, and Mt. Jacob near Many Peaks, where is the northernmost rain forest (or semi-rain forest) of the South Queensland forest system.

From Brisbane, March 19 to April 12, 1958, we made a loop south to Victoria, to collect on high mountains that had been snow covered before. We reached highest altitudes on Mt. Kosciusco, then drove south on the Bonang Highway into Victoria (this road cuts some fine and apparently unworked collecting areas), then collected on the summit ridge of Mt. Baw Baw, on Mt. Buller briefly, on Mt. Hotham again, and at Pretty Valley on Mt. Bogong. Returning north we touched Exeter and Ourimbah (type localities) in south-central New South Wales, Bellangry Forest northwest of Wauchope, Point Lookout again, and localities in the extreme north of New South Wales.

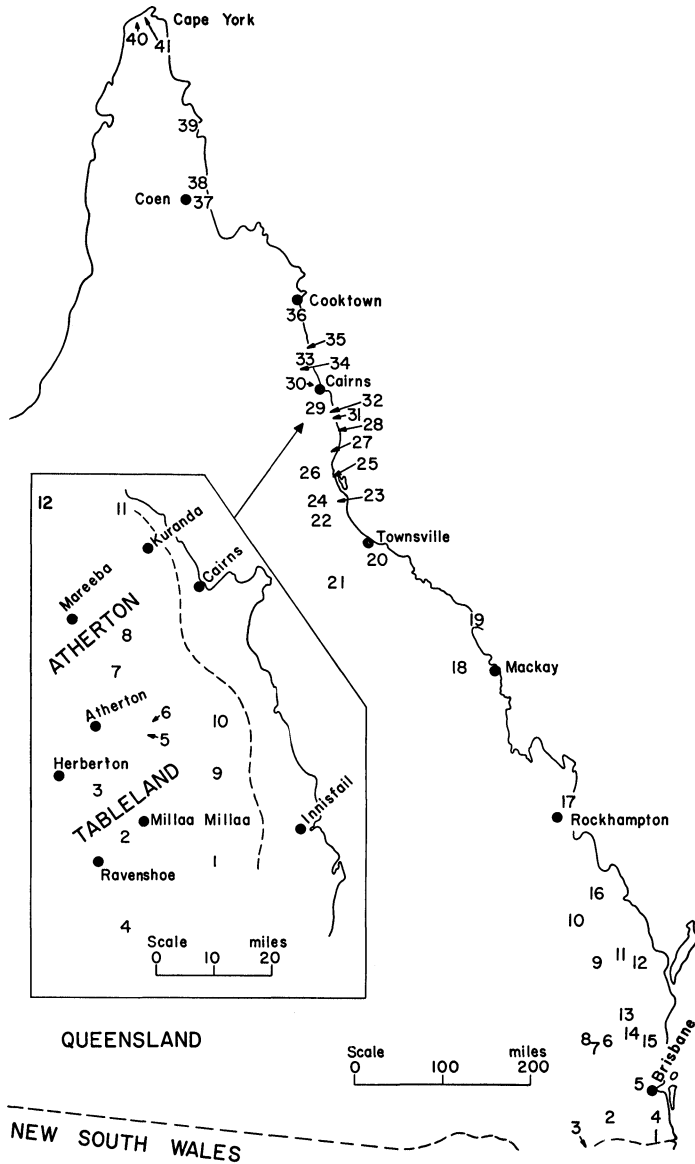
On April 19, 1958, we started another loop, through South Queensland, working rain forest areas, the most important being on the Bunya and Blackall Ranges. Then, beginning May 6, we spent a week at Binna Burra on the McPherson Range on the Queensland-New South Wales border.

Beginning May 23, 1958, we flew back to Cairns, collected along the Black Mt. road north of Kuranda, flew halfway up the Cape York Peninsula to Coen, and from there were taken by Lea Wassell to Silver Plains and the Rocky Scrub (rain forest) on the east side of the peninsula. Returning from this trip, we stopped for nearly a week at Shiptons Flat and Mt. Finnigan, about 25 miles south of Cooktown.

We were back in Sydney June 17, 1958, and from there circled through the southern Blue Mts. (Springwood), the Burragorang Valley, Burrawang, etc.

We started the flight home from Sydney June 25, reaching Boston the afternoon of June 29, 1958.

All specimens collected reached Boston safely, and have been mounted and labeled and are ready for study. We got little except Carabidae and a useful series of ants collected by my son. We had neither time nor strength for general collecting.

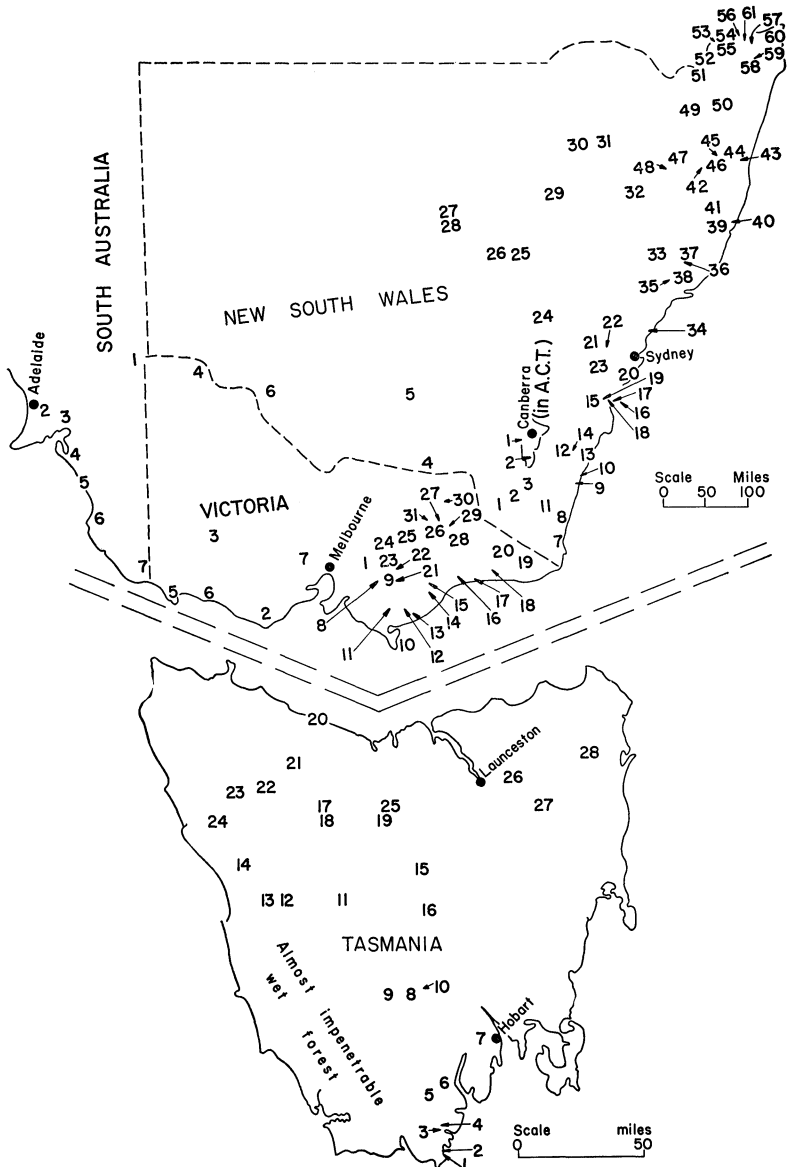


QUEENSLAND

Scale 0 100 200 miles

NEW SOUTH WALES

MAP OF QUEENSLAND WITH INSET OF ATHERTON TABLELAND



MAPS OF NEW SOUTH WALES, VICTORIA, AND EASTERN SOUTH AUSTRALIA AND OF TASMANIA.

LIST OF LOCALITIES

Localities are listed approximately from north to south, because faunal transitions are best treated in that direction, although our collecting (and the numbering of our maps) was in general in the other direction. Letters and numbers following the names refer to the accompanying maps (Q=Queensland map, etc), on which the approximate position of localities is shown by number. One number is sometimes used to include two or more adjacent localities. Names are spelled according to Gazetteer No. 40, AUSTRALIA, prepared by the United States Office of Geography, Dept. of Interior (1957), with my original spelling indicated in parentheses if different. Latitudes and longitudes of most localities can be obtained from this gazetteer. Topography of each locality is indicated by "low" (lowlands, incl. interior plains with lowland topography even if at moderate altitudes), "plat" (plateaus rising from lowlands), "mts" (mountains), and "rge" (mountain range). Altitudes given are usually the approximate or prob(able) altitudes at which collecting was done rather than exact altitudes of fixed points. Types of forests chiefly collected in are indicated as savannah w(oodland), sclerophyll f(orest), and rain f(orest). This is the primary classification of forests in the wetter parts of eastern Australia (see "The Australian Environment," Commonwealth Scientific and Industrial Research Organization, Melbourne, second ed., 1950, p. 78). Savannah woodland has trees (usually eucalypts) widely spaced, and ground covered with grass or herbs. Sclerophyll forest has trees closer, and dense undergrowth of shrubs. Rain forest has trees close, often many vines, but scanty undergrowth. Of course there is variation and transition within this main classification. Savannah woodland varies in height and spacing of trees and (in Tasmania and southern Australia) sometimes merges with sclerophyll forest. Sclerophyll forest may be dry or wet, and wet sclerophyll is sometimes difficult to distinguish from poor rain forest. Tropical rain forest (often with giant fig trees etc.) and south temperate rain forest (often with antarctic beeches of the genus *Nothofagus*) are very different botanically, and entomologically. And tropical rain forest varies considerably and (as here used) sometimes grades into seasonally dry monsoon forest. My classification of forests in the following list is somewhat arbitrary and is based on general impressions rather than exact data. Dates are those of my collecting. Previous collecting done at the same localities in 1931-1932 is indicated in parentheses. Single words or phrases are used

to indicate *principal* collecting methods used at each locality. "Logs" means under logs on the ground, or in rotting logs. "Stones" means under stones. "Waterside" means beside, or in vegetation in, standing or running water. "Drowning" means throwing large quantities of loose soil, leaf litter, or debris into water and catching the Carabidae that come to the surface of the wet materials. This is a little known but very effective collecting method. "Bark" means collecting under loose slabs and flakes of bark on trunks of living trees, usually eucalyptus. A whole special insect fauna lives in this habitat in Australia. "Arboreal" means beating and sweeping. And "light" means collecting insects attracted to artificial light at night. "Usual ground m(ethods)" means first four methods listed above. "All usual m(ethods)" means all methods listed except light, which is separately specified.

- LOCKERBIE, Q41; low; light rain f, savannah w; Jan. 11-15, 58; all usual m, light.
- BAMAGA, Q40; low; savannah w, light rain f; Jan. 7-11. 15-20, 58; all usual m, light.
- IRON RANGE, Q39; low; rain f, savannah w; Jan. 21-28, 58; all usual m.
- TOZER GAP, Q39; mts to over 1000 ft.; rain f, savannah w; Jan. 25-26, 58; logs, stones.
- COEN, named on Q map; low; savannah w, gallery f; May 27, June 4-5, 58 (also 1932); all usual m.
- ROCKY RIVER (Rocky Scrub), Q38; low to mts *c.* 2000 ft.; rain f., savannah w; May 30-June 2, 58 (also west side this "scrub" in 1932); all usual m incl. much drowning of ground debris from upper banks of river in rain f.
- SILVER PLAINS, Q37; low; savannah w; May 27-June 4, 58; logs, waterside, light.
- COOKTOWN, named on Q map; low; poor rain f, savannah w (much cleared); June 5, 10-12, 58; little collecting.
- SHIPTONS FLAT, Q36; *c.* 1000 ft.; good savannah w to gallery rain f, with transitions; June 5-10, 58; all usual m.
- MT. FINNIGAN, Q36; 1000 to over 3000 ft.; rain f, savannah w, transitions; June 5-10, 58; all usual m (collected up to and in edge elfin f, but catch inexplicably poor).
- THORNTON ('s) PEAK (or Mt. Alexandra), Q35; *c.* 1000 to *c.* 4500 ft.; rain f, elfin f near summit; Dec. 21-22, 57; stones, logs (collecting cut short by bad weather).
- MOSSMAN-DAINTREE AREA, Q33; low; diverse vegetation (much altered); Dec. 20-27, 57; little collecting except on Thornton Peak (see above) and Mt. Lewis (see below).
- MT. LEWIS, Q34; to *c.* 4000 ft.; rain f; Dec. 25-27, 57; stones, logs.
- CAIRNS, named on Q map; low; diverse vegetation (much altered) incl. remnants rain f; various dates Dec. 57-Feb. 58, May-June 58; all usual m, light.
- KURANDA, Q30, and named on Atherton Tab map; on plat *c.* 1000 ft.; rain f, some savannah w; various dates Dec. 57 to May 58; all usual m.

- ATHERTON TABLELAND, Q29, and inset on Q map; plat *c.* 2000-3000 ft., with mts to 4000 (attached Mts. Bartle Frere, Bellenden Ker over 5000); many tracts rain f, good savannah w; several visits, Dec. 57 to May 58 (also 1932); intensive collecting at various points, all usual m.
- MT. MOLLOY (town), Atherton Tab map 12 (but town not on the tableland); low; dry savannah w; Dec. 27, 57; little collecting.
- MAREEBA, named on Atherton Tab map; low; savannah w; several brief visits, but collected especially some miles north, Feb. 58; collecting especially on margins shallow, flooded ponds (flood collecting).
- DAVIES CREEK ROAD, Atherton Tab 8; mts to *c.* 3000 ft.; good savannah w to good rain f; Dec. 27-29, 57, May 25, 58; logs, stones.
- MOUNTAINS NORTH OF KAIRI, Atherton Tab 7; to 4000 ft.; rain f; Dec. 19, 57; logs, stones.
- ATHERTON (named on Atherton Tab map); on plat prob. *c.* 3000 ft. (mountains south and west to 4000 ft.), good savannah w, patches rain f on flat tableland near town, much rain f on mts.; Dec. 10-20, 57, Feb. 3-11, 58; all usual m.
- LAKE BARRINE, Atherton Tab 6; on plat prob. *c.* 2000 ft.; rain f; no collecting this trip (much in 1932).
- LAKE EACHAM, Atherton Tab 5; on plat prob. *c.* 2000 ft.; rain f; Feb. 58; stones, waterside.
- HERBERTON, named on Atherton Tab map; prob. *c.* 2000 ft.; savannah w (prob. some rain f to east, not visited by us); Feb. 58; collecting chiefly in piles of dead leaves under small fallen eucalypts.
- LONGLANDS Gap, Atherton Tab 3; mts prob. *c.* 3000 ft.; rain f; Dec. 18, 57, Feb. 11, 58; all usual m.
- THE CRATER, Atherton Tab 3; prob. over 2000 ft.; rain f; Dec. 18, 57; logs, stones.
- MT. BELLENDEN KER, Q32, Atherton Tab 10; to *c.* 5000 ft.; mostly rain f; Dec. 31, 57-Jan. 3, 58; stones, logs.
- MT. BARTLE FRERE, Q31, Atherton Tab 9; to *c.* 5000 ft.; mostly rain f; Dec. 13-16, 57; stones, logs.
- MILLAA MILLAA, named on Atherton Tab map; on plat prob. *c.* 2500 ft.; rain f; Dec. 18, 57 (also 1932); stones, logs.
- MT. FISHER, Atherton Tab 2; to *c.* 4000 ft.; rain f; Feb. 12, 58; stones, logs.
- RAVENSHOE, named on Atherton Tab map; on plat prob. *c.* 3000 ft.; good savannah w, rain f south and east; Feb. 11-13, 20-21, 58; logs, stones, and special collecting by edges of rain pools west of town, washing leaf debris from under thickets etc., and treading heavy aquatic vegetation over deep water in pool of river visible from road 2 or 3 miles west of town.
- CRAWFORDS LOOKOUT, Atherton Tab 1; prob. *c.* 1000 ft.; rain f, savannah w; Feb. 21-22, 58; little collecting.
- INNISFAIL, Q28, and named on Atherton Tab map; low; mixed vegetation (much altered); Feb. 22, 58; no collecting in town, but some in rain f, along Millaa Millaa-Innisfail road; logs, stones.
- TULLY FALLS, Atherton Tab 4; prob. 2000-3000 ft. (above falls); some rain f; Feb. 58; little collecting.
- TULLY, Q27; low; various vegetations; passed Dec. 57, Feb. 58; little collecting.
- CARDWELL, Q25; low; various vegetations; passed Dec. 57, Feb. 58; little collecting.
- KIRRAMA RANGE, Q26, to *c.* 3000 ft., rain f, savannah w; Dec. 4-6, 57, Feb. 22-23, 58; usual ground m.

- INGHAM, Q23; low; mixed vegetation; passed Dec. 57, Feb. 58; little collecting.
- MT. FOX PLATEAU, Q24; *c.* 2000 ft.; savannah w, some rain f; Dec. 3, 57; poor collecting.
- MT. SPEC PLATEAU (incl. Paluma Range), Q22; to *c.* 3000 ft.; rain f, savannah w to west; Nov. 30-Dec. 2, 57, Feb. 23-27, 58; stones, logs.
- TOWNSVILLE, named on Q map; low; dry savannah w (much altered by man); Nov. 29-30, 57, Feb. 27-Mar. 1, 58; little collecting near town, except some at lights in outskirts.
- ELLIOT RANGE, Q20; to over 3000 ft.; savannah w on slopes, rain f on high ridge; Mar. 2, 58; logs, stones in rain f on "Sharp Elliot".
- CHARTERS TOWERS, Q21; low; dry savannah w; Mar. 3, 58; a little river-bank collecting where Townsville road crosses Burdekin R.
- FROSEPPINE, Q19; under 1000 ft.; mixed vegetation (much altered by man) incl. palm f toward Repulse Bay; Nov. 28, 57; very poor collecting (too dry), in palm f.
- MACKAY, named on Q map; low; mixed vegetation (altered by man); Nov. 21-22, 27-28, 57, Mar. 5-6, 58; little collecting near town, but some along road toward Rockhampton.
- EUNGELLA RANGE, Q18; to *c.* 4000 ft.; rain f, good savannah w to west; Nov. 22-27, 57; all usual m.
- BYFIELD, Q17; low; mixed vegetation (largely altered by man) incl. remnants approaching rain f; Nov. 18-19, 57; logs, stones, drowning along small brook in palm f.
- ROCKHAMPTON, named on Q map; low; dry savannah w, swamps, dense dry sclerophyll *c.* 50 miles west; passed Nov. 17-20, 57, Mar. 58; little collecting near the town, mostly around swamps, but some at stated distances in various directions.
- MANY PEAKS, Q16; low; savannah w; Mar. 11, 58; no collecting at town but some along road north.
- MT. JACOB, Q16; *rge c.* 2000 ft.; rain f (or something like it), savannah w; Mar. 11-12, 58; logs, stones.
- MONTO, Q10; low; savannah w, tract of dense dry sclerophyll f; Apr. 23-25, 57; logs, stones esp. in sclerophyll f.
- GAYNDAH, Q9; low; savannah w, formerly rain f but latter cleared; Apr. 22-25, 57; little collecting, mostly bark, river margins.
- BIGGENDEN, Q11; low, hills; savannah w, something like rain f to southwest; Apr. 30, 58; little collecting, in rain f.
- GOODNIGHT FOREST, Q12; low; thick dry sclerophyll; May 1, 58; poor collecting, but a few small carabs by water holes.
- GALLANGOWAN FOREST, *v.* Manumbar, Q13; *rge c.* 2000 ft.; rain f, good savannah w or open sclerophyll f; Apr. 26-27, 58; logs, stones.
- JIMNA, Q14; moderate altitude; mixed vegetation; Apr. 27, 58; little collecting.
- BLACKALL RANGE, incl. Mapleton, Montville, Maleny, Q15; to *c.* 2000 ft.; rain f, good savannah w or open sclerophyll f; Apr. 27-28, May 3-5, 58; logs, stones, mostly in rain f.
- KENILWORTH, Q15; low; mixed vegetation incl. rain f; May 2, 58; logs, stones.
- BUNYA MTS., Q8; to over 3000 ft.; rain f, good savannah w or open sclerophyll f; Apr. 20-21, 58; stones, logs.
- COOYAR CREEK, Q7; low; savannah w; Apr. 19-20, 58; logs.
- BENARKIN, Q6; low; woods approximating rain f; Apr. 19, 58; little collecting.

- YARRAMAN, Q6; low; savannah w, woods approximating rain f; Apr. 19, 58; logs.
- BRISBANE, named on Q map; low; savannah w; various visits Nov. 57 to June 58 (also 1932, 1943); little collecting near city (specimens from nearest rain f, on Mt. Glorious & Mt. Tamborine, labelled from these places).
- MT. GLORIOUS, Q5; prob. c. 1000 ft.; rain f, good savannah w; mid-May 58; little collecting (more in Nov. 43), stones, logs, mostly in rain f.
- MT. TAMBORINE, Q4; plat c. 2000 ft.; rain f; not visited 1957-58 but collected Nov. 1943; logs, stones, drowning debris in rain f.
- CUNNINGHAMS GAP, Q2; mts c. 2000-4000 ft.; rain f; May 13-14, 58; logs, stones (most specimens taken in gap proper, but we collected from there nearly to summit Mt. Cordeaux, c. 4000 ft.).
- MCPHERSON RANGE (Q. Nat. Park), Q1; to c. 4000 ft.; mountain rain f, some savannah w, small areas almost pure *Nothofagus* f on highest points; May 58 (see Binna Burra, below) (collected on McPherson Range also 1932).
- BINNA BURRA (Binnaburra), Q1; on rge c. 3000 ft. and over; mountain rain f, some savannah w; May 6-10, 58; usual ground m.
- BEECHMONT, Q1; on rge c. 3000 ft.; rain f., savannah w; passed repeatedly 1957-1958 but collected only 1943, in rain f probably now cleared.
- SPRINGBROOK, Q1; on rge c. 2000 ft.; mixed vegetations incl. rain f; May 10-11, 58; little collecting, logs, stones.
- STANTHROPE, Q3; to prob. c. 5000 ft.; savannah w etc. (no rain f); passed repeatedly 1958; no personal collecting, but obtained specimens from Mr. E. Sutton.
- WYBERBA, Q3; to over 5000 ft.; savannah w and/or good sclerophyll f, rocky and bushy country; May 16, 58; poor collecting (dry year) but good locality, specimens obtained from Mr. Sutton.
- WOODENBONG, NSW56; moderate alt.; good savannah w; May 17, 58, and other dates; poor collecting (dry year), logs.
- UNUMGAR FOREST (Cox's Road), NSW61; mts c. 2000 ft.; mostly rain f; May 17-18, 58; logs, stones.
- WIANGAREE, NSW57; low; savannah w; Nov. 9, 57; waterside.
- MURWILLUMBAH, NSW60; low to c. 1000 ft.; mixed vegetation incl. rain f c. 10 miles westsouthwest (at Byrrell Ck.); Nov. 10-11, 57; stones, logs, in rain f.
- DUNOON, NSW59; moderate altitude; mixed vegetation including rain f at rather low altitude (also rain f at prob. c. 2000 ft. up forestry road to Whian Whian Forest); Nov. 10, 57, Apr. 12, 58; logs, stones in rain f.
- LISMORE, NSW58; low; mixed vegetation incl. small piece rain f preserved in town, larger piece c. 4 miles northeast; several dates especially Apr. 11, 58; logs, stones, mostly in rain forest 4 miles northeast.
- ACACIA PLATEAU, NSW54; c. 2000 ft.; rain f; Nov. 7-8, 57; logs, stones.
- ACACIA CREEK, NSW53; low; mixed vegetation, now no real rain f; Nov. 7, 57; little collecting.
- TOOLOOM RANGE, NSW55; to c. 2000 ft.; rain f south slope, also savannah w; Nov. 8-9, 57, May 16-17, 58; usual ground m incl. drowning debris from beside small temporary pond in opening in rain f.
- WILSONS DOWNFALL, NSW52; moderate altitude; savannah w; Nov. 7, 57; little collecting.
- TENTERFIELD, NSW51; moderate to rather high altitude; savannah w; Nov. 7, 57; collecting at stated distances in various directions, logs, stones.

- GLEN INNES, NSW49; various altitudes; savannah w; Nov. 5, 7, 57, and other times briefly; collecting at stated distances in various directions, logs, stones.
c. 40 miles eastnortheast (ENE) Glen Innes, NSW50; moderate altitude; savannah w, heathy f, patches rain f; Nov. 6, 57; usual ground m.
- ARMIDALE, NSW47; moderate altitude; savannah w; Nov. 2-5, 57, and other brief visits; little collecting.
- URALLA, NSW48; moderate altitude; savannah w; Nov. 3, 57; logs.
- EBOR, NSW45; to c. 5000 ft.; savannah w; Oct. 31-Nov. 1, 57, Apr. 9, 58; logs, stones.
- NEW ENGLAND NATIONAL PARK (Point Lookout), NSW46; to over 5000 ft.; rain f incl. *Nothofagus*, some savannah w; Nov. 1-2, 57, Apr. 9, 58; usual ground m.
- DORRIGO, NSW44; plat c. 2000-3000 ft. (and same plateau west rises to c. 5000 ft. at Ebor etc.); rain f, savannah w; Oct. 31, 57 (also 1932); stones, logs.
- BELLINGEN, NSW43; low; mixed vegetation incl. remnants of something like rain f; Oct. 30-31, 57; logs, stones.
- THE BIG HILL (Kempsey-Ebor road), NSW42; up to Ebor plat; semi-rain f; Apr. 8, 58; logs, stones.
- BELLANGRY FOREST (northwest of Wauchope), NSW41; mts to prob. c. 3000 ft.; rain f, said to include *Nothofagus*; Apr. 6-7, 58; logs, stones.
- THE COMBOYNE, NSW39; plat to c. 2800 ft.; mixed f incl. remnants rain f in gullies; Oct. 28-29, 57; logs, stones, especially near Mt. Gibraltar and in gully northeast.
- PORT MACQUARIE, NSW40; low; mixed f incl. small tract something like rain f; Oct. 29-30, 57; logs.
- MT. ROYAL RANGE, NSW33; plat to c. 5000 ft.; savannah w on slopes, savannah w and rain f incl. *Nothofagus* on plat; Oct. 23-27, 57; usual ground m (see 3 following localities).
- BARRINGTON HOUSE, NSW33; low at southeast foot Mt. Royal Range; gallery rain f along river; Oct. 25-26, 57; usual ground m.
- BARRINGTON TOPS, NSW33; plat on southeast end Mt. Royal Range, which see (above); Oct. 27, 57 (also 1932); usual ground m.
- TOMALLA TOPS, NSW33; plat on northwest end Mt. Royal Range, which see (above); Oct. 23-25, 57; usual ground m.
- GLOUCESTER, NSW37; low; savannah w; Oct. 28, 57; logs.
- PATERSON, NSW35; low; savannah w; Oct. 25, 57; logs.
- STRATFORD, NSW36; low; savannah w; Oct. 28, 57; logs.
- BOORAL (10 miles east of), NSW38; low; savannah w, thicker in stream gully; Apr. 6, 58; logs.
- OURIMBAH, NSW34; low; savannah w, formerly semi-rain f (we did not find latter); Apr. 5, 58; poor collecting.
- TAMWORTH, NSW32; low; savannah w; Oct. 22, 57; chiefly waterside.
- MT. KAPUTAR, NSW31; to c. 4000 ft.; savannah w with underbrush in places; Oct. 20, 57; logs, stones, chiefly near summit.
- NARRABRI, NSW30; low; savannah w and/or rather dry sclerophyll f; Oct. 19, 57; little collecting.
- COONABARABRAN (north of), NSW29; low; savannah w and/or dry sclerophyll f; Oct. 19, 57; logs, stones.
- NYNGAN, NSW27; low; originally dry savannah w or sclerophyll f, now mostly cleared for sheep; in vicinity Oct. 17-19, 57; poor collecting (dry year) at stated distances south and east.

- BOGAN RIVER, NSW28; low; originally dry savannah w or sclerophyll f, now mostly cleared for sheep; Oct. 18-19, 57; poor collecting (dry year) except by edges pools in bed of Bogan R., but specimens obtained from Mr. J. W. T. Armstrong.
- NARROMINE, NSW26; low; savannah w and/or rather dry sclerophyll f; Oct. 17, 57; little collecting.
- DUBBO, NSW25; low; savannah w or rather dry sclerophyll f; Oct. 17, 57; little collecting.
- ORANGE, NSW24; low; originally savannah w or rather dry sclerophyll f; Oct. 16, 57; little collecting.
- MT. CANOBOLAS, NSW24; to c. 4500 ft.; savannah w; Oct. 16-17, 57; stones, logs near summit and especially near camp site at base (specimens taken at base are so labeled).
- BLUE MTS., NSW21; mts to over 3000 ft.; various vegetations incl. bushy heath, sclerophyll f, savannah w, wetter f in ravines; collected only at Springwood (see below) in 1957-58 (but at several localities in 1932).
- SPRINGWOOD, NSW22, prob. c. 1000 ft.; savannah w, wetter f in ravine to south; June 58; logs, stones, especially in wet ravine.
- BURRAGORANG VALLEY, NSW23; low; savannah w; June 58; logs.
- SYDNEY, named on NSW map; low; originally savannah w, dry sclerophyll, etc., but now much altered by man; in vicinity various dates 1956-1958 (also 1931-1932, 1943); little collecting near city.
- NATIONAL PARK, NSW20; low; sclerophyll f etc.; Oct. 9-10, 57 (also 1931); little collecting.
- EXETER, NSW15; low; savannah w; Apr. 4, 58; logs.
- BURRAWANG, NSW19; low; savannah w; June 58; logs, stones.
- MACQUARIE PASS, NSW18; edge plat; savannah w and thickets; June 58; drowning ground debris.
- JAMBEROO, NSW17; low; savannah w and wetter thicker f in ravine; June 58; stones, logs in wetter f.
- KIAMA, NSW16; low but Saddleback Mt. to prob. c. 2000 ft.; savannah w much cleared, but remnants of good woods still on Saddleback; Oct. 8-9, 57; logs, stones in f on Saddleback.
- SADDLEBACK MT., see Kiama, above.
- TERMEIL (Batemans Bay), NSW13; low, but worked into hills northwest nearly to Pigeon House; savannah w; Oct. 5-7, 57; logs, stones, and by pools intermittent brook in hills toward Pigeon House.
- BATEMANS BAY, see Termeil (above).
- PIGEON HOUSE, see Termeil (above).
- CLYDE MT., NSW14; prob. c. 2000 ft. (edge plat); good mixed forest with considerable underbrush; several visits from Canberra May-Aug. 57; logs, stones.
- BRAIDWOOD, NSW12; low (but on plat); savannah w (mostly cleared); July 11, 57; flood collecting along river and streams.
- MORUYA, NSW10; low; savannah w (mostly cleared); July 11, 57; flood collecting.
- BODALLA, NSW9; low; savannah w (mostly cleared); July 11, 57; collecting esp. by standing flood water in woods.
- BROWN MT., NSW11; prob. c. 2000 ft. (edge plat); good woods with considerable underbrush; Oct. 4, 57; logs, stones.
- BEGA, NSW8; low; savannah w (partly cleared); Oct. 4, 57; logs, stones.
- EDEN, NSW7; low; savannah w (much cleared); Oct. 4, 57; collecting at stated distances north and west, logs, stones.
- COOMA, NSW3; on plat; savannah w; passed several times; little collecting.

- ADAMINARY DAM, NSW2; on plat; savannah w; Aug. 3, 57; attempted flood collecting as dam filled, but unsuccessful.
- MT. KOSCIUSCO, NSW1; to over 7000 ft. (highest mt in Australia); good sclerophyll f on slopes, open snow gum w higher, mountain moors still higher; Aug. 3, 57, Mar. 22-23, 58 (also 1931); usual ground m, bark.
- ALBURY, NSW4; low; savannah w etc. (mostly cleared); passed on various occasions; little collecting.
- BALRANALD, NSW6; low; various dry w; Sept 2-3, 57; little collecting.
- NARRANDERA, NSW5; low; various more or less dry w; Sept. 1-2, 57; little collecting, mostly by drowning broken earth
- CANBERRA, Australian Capital Territory, named on NSW map; in wide valley on plat; savannah w; May through Aug., 57; usual ground m, bark, but collecting poor (dry year).
- BRINDABELLA RANGE (incl. Mt. Franklin and Mt. Gingera), ACT1 on NSW map; to over 6000 ft.; savannah w, sclerophyll f, open snow gum forest (in order with increasing altitude); May, June, 57; usual ground m.
- GUJGENBY RIVER, ACT2 on NSW map; in valley on plat; savannah w; June 9, 57; logs, stones, bark.
- MITTA MITTA, V30; low; sclerophyll f; Apr. 30-May 1, 57; little collecting.
- GLEN WILLS, V29; moderate altitude; sclerophyll f; Apr. 30, 57; bark.
- OMEQ, V28; low; sclerophyll f; Apr. 25-30, 57; logs, stones, bark, especially along road toward Mt. Hotham.
- MT. BOGONG incl. Pretty Valley, V27; plat to c. 6000 ft.; sclerophyll f on slopes, open snow gum w and moors higher; Apr. 2, 58; logs, stones.
- PRETTY VALLEY, see Mt. Bogong.
- MT. HOTHAM, V26; to c. 6000 ft.; sclerophyll f on slopes, open snow gum w and moors higher; Apr. 24-28, 57, Mar. 29-31, 58; usual ground m, bark.
- BRIGHT, V31; low; sclerophyll f; Apr. 23-24, 57, Mar. 29, Apr. 1, 3 (toward Mt. Buffalo on latter day), 58; logs, stones, bark.
- MT. BULLER, V25; to over 5000 ft.; savannah w, sclerophyll f on lower slopes, open snow gum w higher; Mar. 28, 58; logs, stones, drowning debris from under clumps of snow gums.
- JAMIESON, V24; moderate altitude; sclerophyll f; Mar. 27, 58; little collecting.
- WOODS POINT, V23; moderate altitude; sclerophyll f; Mar. 27, 58; little collecting.
- ABERFELDY, V22; moderate altitude; savannah w and/or sclerophyll f; Mar. 27, 58; logs, stones.
- WALHALLA, V21; moderate altitude; sclerophyll f and/or savannah w; Mar. 27, 58; little collecting.
- MT. BAW BAW, V9; to c. 5000 ft.; sclerophyll f on slopes, open snow gum w higher, vestiges rain f incl. *Nothofagus* in gullies c. 4000 ft.; Sept. 27-28, 57, Mar. 25-27, 58; logs, stones on wooded slopes (1957), and in high snow gum w (1958), and drowning debris from *Nothofagus* gully (1958) (all "*Trechus*" by last method).
- MT. DONNA BUANG, V1; to c. 4000 ft.; sclerophyll f, approaching temperate rain f in gullies; several visits Apr. 57 (also 1931); logs, stones, drowning, especially near summit and at Cement Creek.
- CEMENT CREEK, see Mt. Donna Buang.
- BONANG HIGHWAY, V20; moderate altitudes (from plat south to low); sclerophyll f approaching temperate rain f in gullies; Mar. 24, 58; logs, stones, drowning.
- MT. DRUMMER, V19; prob. to c. 2000 ft.; savannah w, sclerophyll f; Oct. 3, 58; logs, stones, especially in gully north of road on east slope.

- ORBOST, V18; low; savannah w and/or sclerophyll f; Oct. 2-3, 57; little collecting.
- LAKES ENTRANCE, V17; low; savannah w and/or sclerophyll f; Oct. 2, 57; little collecting.
- BAIRNSDALE, V16; low; savannah w and/or sclerophyll f; Oct. 2, 57; little collecting.
- STRATFORD, V15; low; savannah w and/or sclerophyll f; Oct. 2, 57; little collecting.
- SALE, V14; low; savannah w; Oct. 1-2, 57; flood collecting.
- YARRAM, V13; low; savannah w and/or sclerophyll f; Oct. 1, 57; little collecting.
- TARRA VALLEY, V12, on rge prob. *c.* 1000 ft.; sclerophyll f approaching temperate rain f in wet gullies; Sep. 30-Oct. 1, 57; logs, stones.
- GUNYAH, V11; on rge prob. *c.* 1000 ft.; sclerophyll f approaching temperate rain f in wet gullies; Sept. 30, 58; logs, stones.
- WILSONS PROMONTORY (most southern point of continental Australia), V10; low; sclerophyll f, heath, moors, dunes; Sept. 28-30, 57; poor collecting, tried especially in forest at Lilly Pilly Gully.
- NOOJEE, V8; moderate altitude; savannah w to sclerophyll f; Sept. 26, 57, Mar. 25, 58; logs in woods by Neerim-Noojee road.
- MELBOURNE, named on V map; low; savannah w (mostly cleared); Apr. & Sept., 57; little collecting near city.
- WERRIBEE GORGE, near Bacchus Marsh, V7; low; savannah w; Sept. 19, 21, 57; logs, stones, waterside (beautiful locality, but dry year).
- BEECH FOREST, see Otway Ranges.
- OTWAY RANGES incl. Beech Forest, V2; plat *c.* 2000 ft.; sclerophyll f approaching rain f in ravines, some *Nothofagus*; Apr. 12-13, Sept. 17-18, 57; logs, stones drowning, especially at Tanybryn Junction and Crowes.
- PORT FAIRY, V6; low; various vegetations; Sept. 17, 57; little collecting.
- PORTLAND, V5; low; various vegetations; Sept. 17, 57; little collecting.
- THE GRAMPIANS, V3; mts prob. to over 2000 ft., dry sclerophyll w, heath; Apr. 14-15, 57; stones, logs (poor collecting, dry year).
- MILDURA, V4; low; dry woods etc.; Sept. 3, 57; little collecting.
- RENMARK, SA1; low; dry woodland etc., much cleared; Sept. 4, 57; little collecting.
- ADELAIDE, named on SA map; low; savannah w (much cleared); Sept. 6-14, 57 (also 1931); little collecting near city.
- MT. LOFTY RANGE, SA2; plat to *c.* 2000 ft.; savannah w etc.; Sept. 9, 14, 57; stones, logs.
- MURRAY BRIDGE, SA3; low; various vegetations; Sept. 15, 57; collecting mostly along road south toward Meningie.
- MENINGIE, SA4; low; various dry vegetations; Sept. 15, 57; collecting mostly along roads north and east.
- THE COORONG, SA5; lagoon connected with ocean; various dry vegetations, sand; Sept. 15, 57; little collecting.
- KINGSTON, SA6; low; various dry vegetations; Sept. 16, 57; little collecting.
- PRINCES HIGHWAY at South Australia-Victoria line; V7; low; good savannah w; Sept. 16, 57; logs, digging (carenums and *Teropha*).
- LAUNCESTON, named on T map; low; savannah w etc.; based here Feb. 24-Apr. 5, 57; little collecting near city.
- MT. BARROW, T26; to *c.* 4000 ft.; sclerophyll f on slope, *Nothofagus* thickets near tree line, open summit; Apr. 2, 57; stones near summit, drowning debris from *Nothofagus* thickets, logs, stones in f near base.

- MT. BEN LOMOND, T27; to c. 5000 ft.; savannah w near base, sclerophyll f on slopes (no rain f but ti tree flats and wet gullies in sclerophyll area), moors etc. above c. 4000 ft.; Mar. 5-10, 57; usual ground m, bark.
- BLUE TIER (plat), T28; plat c. 2000 ft.; temperate rain f incl. *Nothofagus* (partly cleared); Mar. 26-Apr. 1, 57; usual ground m incl. much drowning of debris from rain f. Included in collection from this locality are specimens taken in *Nothofagus* f (big trees) beside road between Goshen and Weldborough.
- LOTTAH, T28; probably c. 1000 ft. (foot of Blue Tier); probably formerly sclerophyll f; Mar. 26, Apr. 1, 57, little collecting. This is an old type locality, but the vegetation has been much altered, and the old collections may have been made many miles from the town of Lottah, perhaps on the Blue Tier.
- GOULDS COUNTRY, T28; moderate altitude; wet sclerophyll f; Apr. 1, 57; logs, stones, drowning debris from under thickets.
- MOLE CREEK, T25; low; savannah w; Apr. 3, 57; bark, and unsuccessful attempted cave collecting.
- MERSEY RIVER, T19; deep river valley; sclerophyll f; Mar. 2-3, 57; poor collecting, mostly washing river banks.
- WALDHEIM, v. Cradle Mt., T17; mts c. 4000 ft.; temperate rain f incl. *Nothofagus*, open snow gum w, moors; Feb. 23-Mar. 1, 57; usual ground m incl. much drowning of debris from rain f and from under clumps of snow gums.
- CRADLE MT., T18; c. 5000 ft.; moors, bushy heath, rocks, mountain lakes; Feb. 26, 57; stones to c. 4500 ft., a little drowning.
- BURNIE, T20; low; savannah w; Mar. 13, 23, 57; little collecting.
- HIGH LAND SOUTH OF BURNIE, T21; prob. c. 1000-2000 ft., wet sclerophyll f, temperate rain f incl. *Nothofagus*; Mar. 20-23, 57; usual ground m.
- WARATAH, T22; prob. c. 2000 ft.; temperate rain f incl. *Nothofagus*, wet sclerophyll f; Mar. 13-14, 18-20, 57; usual ground m incl. much drowning of debris from rain f. This is a famous old type locality. For practical purposes it includes Magnet (not visited by us), which is nearby.
- MAGNET, T22, see Waratah, above.
- WHYTE RIVER, T23; low; sclerophyll f, temperate rain f incl. *Nothofagus*; Mar. 17-18, 57; usual ground m.
- CORINNA, T24; low; temperate rain f incl. *Nothofagus*; Mar. 14-17, 57; usual ground m.
- ZEEHAN, T14; low; wet sclerophyll f, rain f in places (but much cleared); Jan. 17-19, 57; usual ground m, mostly c. 8 miles north, and along Rosebery Road.
- QUEENSTOWN, T13; low; vegetation stripped; Jan. 17, 19, 57; little collecting except along road toward Lake St. Clair.
- (THE) KING RIVER, T12; low; original f stripped, now ti tree thickets etc.; Jan. 17, 19, 57; mostly washing river bars.
- LAKE ST. CLAIR, T11; plat and mts c. 2400 ft. and over; savannah w (to south), wet sclerophyll f, heavy temperate rain f incl. much *Nothofagus*; Jan. 11-17, 19, 57; usual ground m, and waterside near lake, treading wet moor toward Mt. Rufus.
- GREAT LAKE, T15; on plat c. 3500 ft.; savannah or snow gum w, open (stripped?) country, moors; Jan. 20 (south end of lake), Mar. 4 (north end), 57; stones, logs at south end, drowning debris from under pencil pines above north end of lake.
- OUSE VALLEY, T16; deep valley; savannah w; Jan. 20, 57; logs etc., bark.

- TARRALEAH, c. 20 miles southeast L. St. Clair (T11); moderate altitude; sclerophyll f (also rain f?); Jan. 11, 57; little collecting (but specimens received from Prof. V. V. Hickman).
- ELLEDALE, T10; low; savannah w and/or sclerophyll f; Jan. 11, 57; water-side (by pond in open).
- MT. FIELD, T8; to c. 4000 ft.; wet sclerophyll f, temperate rain f on slopes, open snow gum w, moors above, mountain lakes; Jan. 2-7, 57; usual ground m especially logs, stones toward Mt. Field West, drowning debris from under pencil pines near Lake Dobson, drowning in temperate rain f c. half way up road, logs, bark at base.
- FLORENTINE VALLEY, T9; low; wet sclerophyll f with gigantic eucalypts, strips of rain f with *Nothofagus*; Jan. 25-27, 57; usual ground m.
- HOBART, named on T map; low; savannah w etc.; based here Dec. 7, 56 to Feb. 23, 57; specimens labeled "v. Hobart" are from v. city south to v. Kingston, by usual ground m, bark.
- MT. WELLINGTON, T7; to c. 4000 ft.; sclerophyll f approaching rain f in gullies (but altered by burning), open grass near summit; several visits Dec. 56 to Feb. 57; usual ground m (collecting poorer than formerly, probably because of fires in last few decades).
- ARVE RIVER, T6; low; wet sclerophyll f with gigantic eucalypts, rain f with *Nothofagus*; Dec. 20-26, 56; usual ground m, especially drowning debris from ground around bases of big trees in forest.
- HARTZ MT., T5; to c. 4000 ft.; wet sclerophyll f and heavy rain f (fine *Nothofagus*) on slopes, moors and stone above c. 3000 ft.; Feb. 8-10, 57; usual ground m.
- HASTINGS, T4; low; sclerophyll f; Dec. 26, 56, Feb. 10-12, 57; little collecting, but good things under logs, boards in second growth along old logging road.
- IDA BAY CAVE, T3; low; wet cave, opening in sclerophyll f; Dec. 27, 56, Feb. 13, 57; cave collecting, and logs, streamside near cave mouth.
- CATAMARAN, T2; low; wet sclerophyll f; Dec. 28-29, 56; logs etc.
- COCKLE CREEK, T1; low; wet sclerophyll f; Dec. 28, 56; logs, stones, treading small swampy pond.



Hindawi

Submit your manuscripts at
<http://www.hindawi.com>

