men and was convinced that my original identification was correct. This supposition was kindly confirmed by Mr. M. Shaffer of the Department of Entomology at the British Museum (Natural History).

To my knowledge this alpine species has not been recorded before from the British Isles outside Scotland. If I had realised the significance of the record at the time I would have tried to identify the food plant. There were a large number of fern plants growing near the lake but I did not know to what species they belonged. — P. J. JEWESS, Boyces Cottage, Newington, Sittingbourne, Kent ME9 7JF.

NINETEENTH-CENTURY ISSUES OF SMITH AND ABBOT, "THE NATURAL HISTORY OF THE RARER LEPIDOPTEROUS INSECTS OF GEORGIA" (1797). — In an initial study of "Smith and Abbot" (93: 213-218) I suggested that the work had a long printing history, and that its plates (some with new imprints) were available as late as three decades after the original publication. I have since been conducting a census of copies of the entire work to collect additional data.

It has long been known that some copies of the book included plates printed on paper with watermarks dated as late as the 1820s. Preliminary results of my census (based on thirty-five copies at the moment of writing) suggest that copies were made up from the original sheets of text, watermarked 1794, and successive impressions of the plates. Later copies (still with the 1797 title and initial printing of the text) have plates with watermarks dated from 1817 to 1827, and some of these copies include one or more of the original plates with 1794 watermark dates. So "new" copies of the entire "1797" work were being issued as late as 1827 and perhaps later; one of the "R. Martin" plates in the dos Passos set without text, discussed in my paper cited above, bears an 1828 watermark.

Further data could well revise these estimates, and indicate an even more interesting bibliographical history. Hopefully more will be learned about the Martin imprints. A more complete report on the printing of "Smith and Abbot" will appear in time, and I would appreciate hearing from owners of copies I have not examined. — RONALD S. WILKINSON, 228 Ninth Street, N. E., Washington, D. C.

20002.

CACOECIMORPHA PRONUBANA HBN. (LEP.: TORTRICIDAE): SUCCESSFULLY REARED ON ARTIFICIAL DIET, WITH A NOTE ON ITS DIAPAUSE REQUIREMENTS. -This species is generally polyphagous with a preference for Euonymus japonica (Bradley et al., 1973) and West (1982) while detailing some further foodplants, including imported foreign species, has pointed out that local preferences for food may be shown. In October last year I was given some unidentified ova which were laid on Oleander (Nerium oleander L.) growing in the London Butterfly House, at Syon Park, Middx. Similar eggs had also been laid on other plants. When these eggs hatched the young larvae resolutely refused to eat the Oleander leaves and those left with no other choice all died. When it was clear that they were not eating, the larvae were offered a choice of cabbage or artificial diet. The larvae immediately started feeding on both these foodplants, fed up and pupated successfully and the

resultant imagines proved to be *C. pronubana*. The artificial diet used was the cabbage formulae normally used for rearing *Pieris brassicae* L. It was formulated and used according to the methods

described by Gardiner (1978).

The moths obtained readily paired and the next generation was again reared on the diet or on cabbage. For convenience it was found that the moths readily oviposited on the sides of 60 ml plastic vials, into the bottom of which freshly-made diet could be poured. For ease of starting these very small larvae, it was found advisable to roughen the surface of the set diet by intensive scratching with a large needle, which was the most convenient instrument to use. The larvae were then changed onto fresh diet when they reached their final instar. At a temperature of 20-25°C the total development period was six weeks, with no difference between the natural foodplant, cabbage, or the diet-fed larvae. Most of the larvae were kept under a photoperiod of 18 hours light, 6 hours dark per day. A number however were kept on a 12 hour light 12 dark regimen and, the imagines not having emerged after two months, can now be concluded to be in diapause, thereby proving that C. pronubana has a facultative, light controlled diapause requirement. It is normally (Bradley et al, 1973) a bivoltine species in this country, so this is not perhaps surprising.

I have not previously seen a record of this species from any *Brassica*, and it can now be added to the ever-increasing number of species that can be successfully kept in culture on artifical diet. I suspect that it is not really necessary to use a cabbage-flavoured one

howerer.

References: Bradley, J. D., Tremewan, W. G., Smith, A. (1973) British Tortricid Moths. pp 251. Ray Soc., London. Gardiner, B.O.C. (1978) The preparation and use of artificial diets for the rearing of insects. Ent. Rec. & J. Var. 90, 181-184, 267-270, 287-291. West, B. K. (1982) Cacoecimorpha pronubana Hbn., (Lep.: Tortricidae): Larval foodplants including damage to Skimmia japonica Thunb. Ent. Rec. & J. Var. 94: 38. — B. O. C. GARDINER, UICP, Dept. of Zoology, Downing Street, Cambridge.

THE CHEQUERED SKIPPER: CARTEROCEPHALUS PALAEMON PALLAS IN ENGLAND, 1976. — In view of the considerable importance of this Journal as a historical record, may I point out that on the 6th June, 1976, I did see one newly emerged specimen of this butterfly on the site where it had been seen by other observers in 1975. — A. ARCHER-LOCK, 4 Glenwood Road, Mannamead, Plymouth, Devon PL3 5NH.

A FEBRUARY DYTISCUS (COL., DYTISCIDAE). — I have rarely found beetles of this genus in my light-trap and was most surprised to find a female *Dytiscus marginalis* Linnaeus amongst the small catch of 1st/2nd February 1982 in the trap in my Axminster garden. Dr. Anthony Eve, who is collecting records of water-beetles from light-traps, tells me that this species flies mainly on *hot* nights and that this exceptionally early date is worth publication. — E. C. PELHAM-CLINTON, Furzeleigh House, Lyme Road, Axminster, Devon, EX13 5SW, 22.ii.1982.



Gardiner, Brian O C. 1982. "Cacoecimorpha pronubara Hbn. (Lep.: Tortricidae) successfully reared on artificial diet, with a note on its diapause requirements." *The entomologist's record and journal of variation* 94, 122–123.

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