with fawn. Mid-ventral area greyish-green. Spiracles with black rims. Thoracic legs straw-coloured, often tinged with green proximally, and occasionally lightly suffused with fawn.

Head width:  $1.10 \pm 0.03 \text{ mm}$  (25 larvae).

Duration of stadium:  $4.0 \pm 0.6$  days (33 larvae).

Fifth-Stadium Larva (Figs. 5–8). Larvae occurring in two colour phases, pale fawn and green. Head straw-coloured, faintly mottled with orange, and suffused with green in green specimens. Prothoracic shield pale orange or pale green; three narrow white longitudinal lines usually evident; shield marked with black around bases of setae. Suranal shield pale fawn or green, marked with white and with black setal bases. Trunk pale fawn or light green. Mid-dorsal band somewhat darker than remainder of dorsum. Subdorsal and supraspiracular areas undistinguished, mauve-grey with six or seven longitudinal lines of pale fawn or bright green; longitudinal lines often irregular and discontinuous. Spiracular band white with a median shade of fawn or green. Suprapodal area pale fawn or green, lightly marked with mauve-grey. Mid-ventral area pallid fawn or pale green. Thoracic legs pale fawn, suffused with green in green specimens.

Head width:  $1.75 \pm 0.08 \text{ mm}$  (7 larvae).

Duration of stadium:  $5.4 \pm 1.1$  days (33 larvae).

Pupa (Figs. 9, 10). Medium orange-brown, the appendages often suffused with green. Spiracles on a level with general surface of cuticle; spiracular sclerites weakly projecting. Anterior marginal areas of abdominal segments 5, 6 and 7, each with a rather wide band of prominent pitting. Proboscis terminating well anterior to apexes of wings. Apex of tenth abdominal segment broadly rounded and bearing two short, fine setae.

Length from anterior end to posterior margin of fourth abdominal segment:  $8.1\pm0.4~\mathrm{mm}$  (23 pupae).

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## NATURAL INTER-BREEDING OF CLOSE NYMPHALID GROUPS

On June 12, 1971 on the hilltops of Mother Cabrini Shrine in Jefferson County, Colorado, a freshly emerged female of *Melitaea pola arachne* Edwards was found in copulation with a male *Chlosyne gorgone carlota* Reakirt. The male was hanging and the female was flying. The time was 0920 and the legend was Joel Jablonski.

RAYMOND J. JAE, 1286 South Umatilla St., Denver, Colorado 80223.