PLATES OF
VECTOR-BORNE DISEASES IN VIETNAM

Harold George Scott, Ph.D.

1 JULY 1966

Second Printing 1967

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL
NATIONAL
COMMUNICABLE DISEASE CENTER
Atlanta, Georgia 30333

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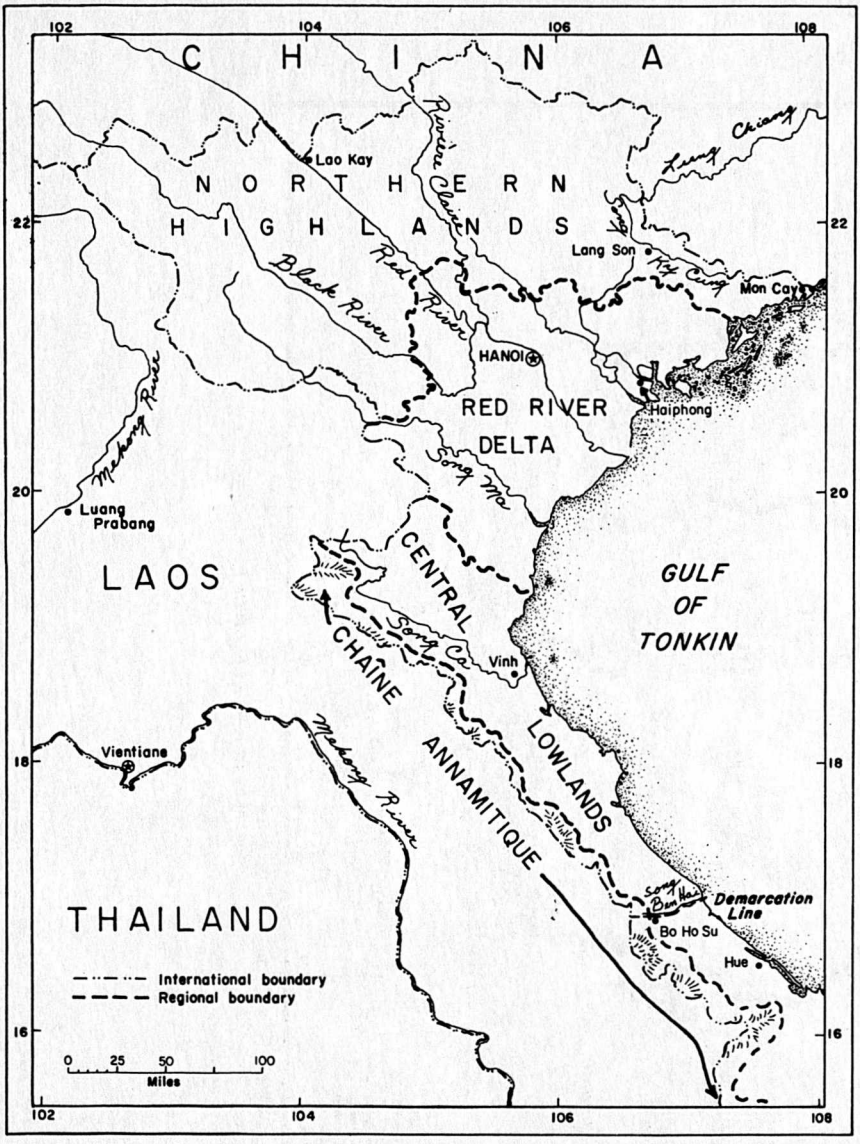
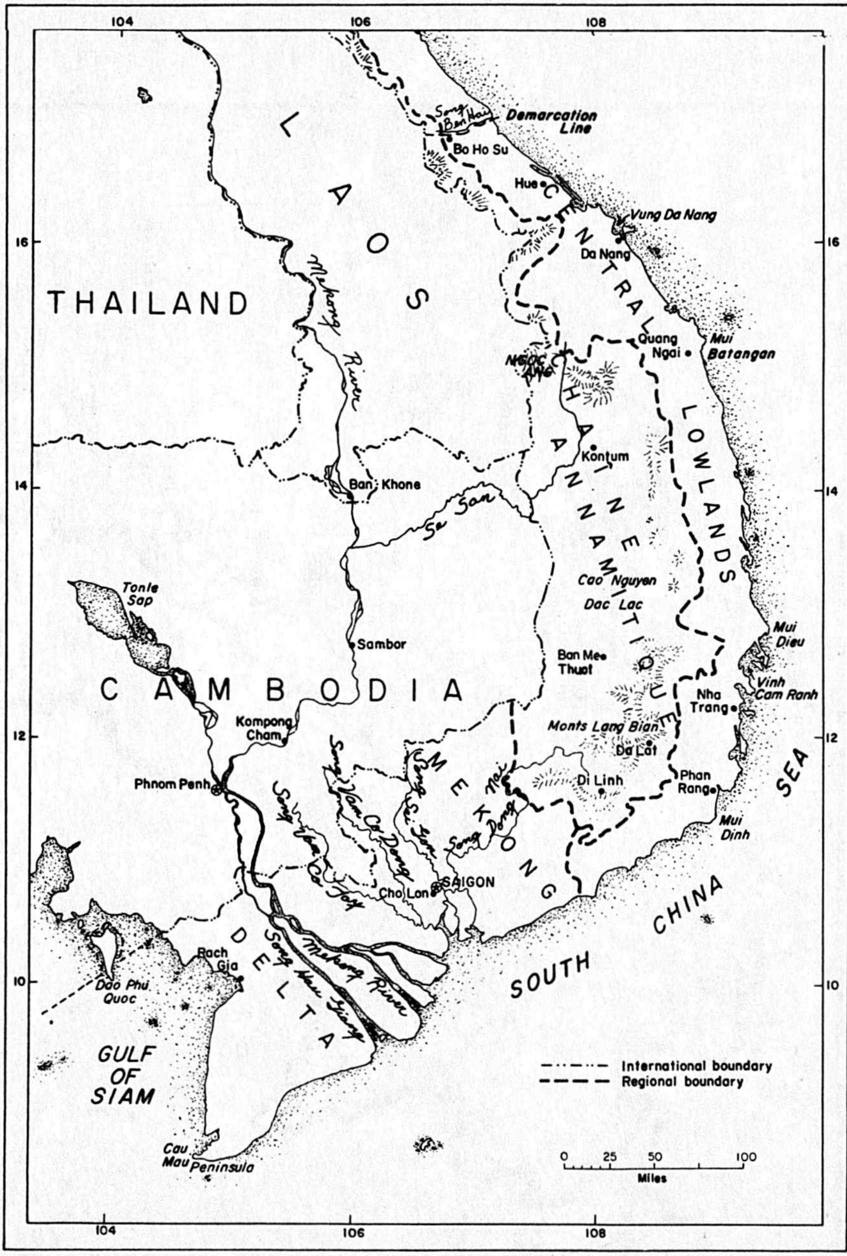
STEM CLV. GR. 024-B

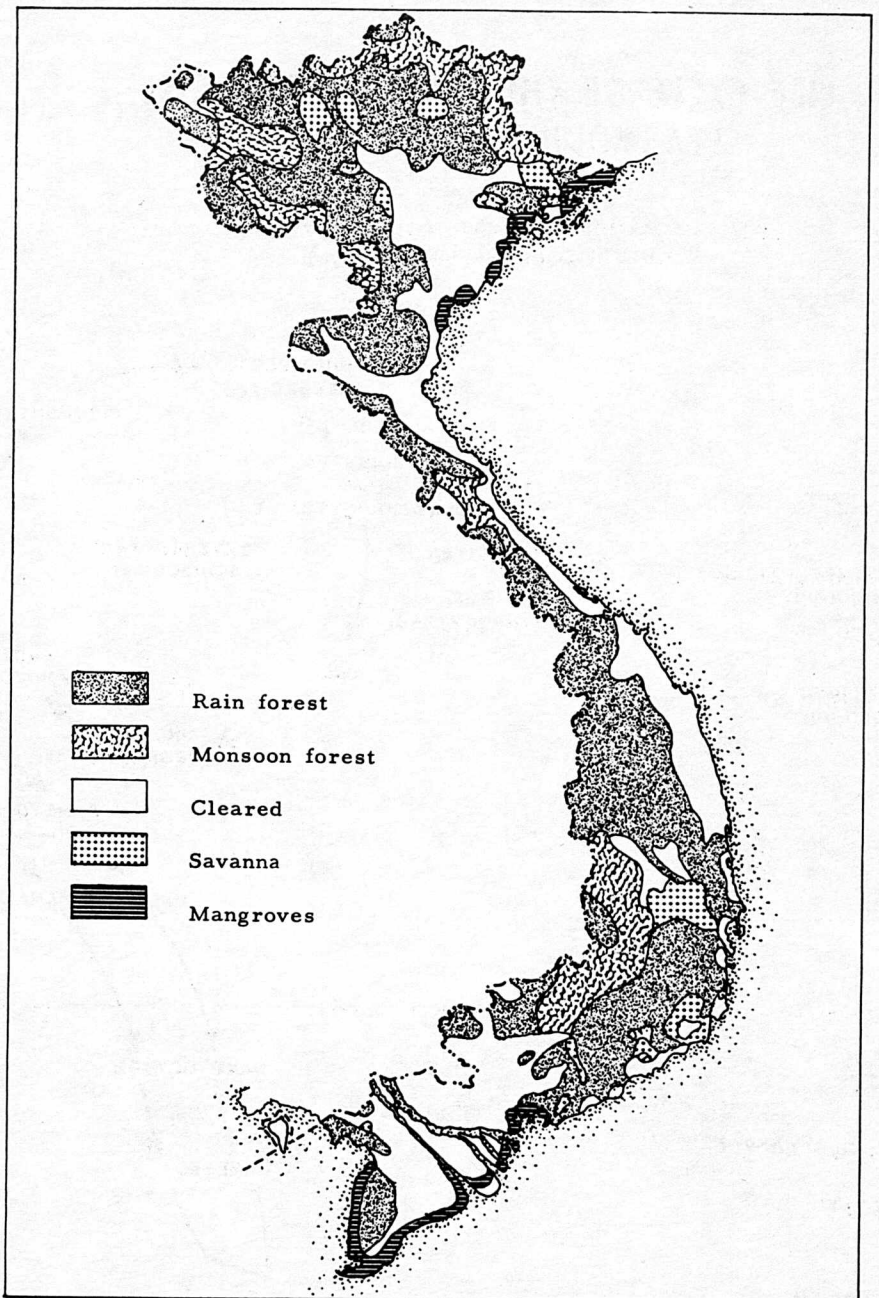
FRENCH PLACE - NAMES



GEOGRAPHICAL REGIONS OF VIETNAM
From U.S. Army



THAILAND
LAOS
CAMBODIA
Demarcation Line
Bo Ho Su
Hue
Vung Da Nang
Da Nang
CENTRAL
LOWLANDS
Quang Ngai
Mui Batangan
Mekong River
Ban Khone
Kontum
Se San
CHAINE ANNAMITIQUE
Cao Nguyen Dac Lac
Tonle Sap
Sambor
Ban Me Thuot
Mui Dieu
Vinh Cam Ranh
Nha Trang
Kompong Cham
Monts Lang Bian
Da Lat
Phnom Penh
MEKONG
Di Linh
Phan Rang
Mui Dinh
SAIGON
Cho Lon
SEA
CHINA
SOUTH
DELTA
Rach Gia
Dao Phu Quoc
GULF OF SIAM
Cau Mau Peninsula
International boundary
Regional boundary
Miles
0
25
50
100
104
106
108
16
14
12
10



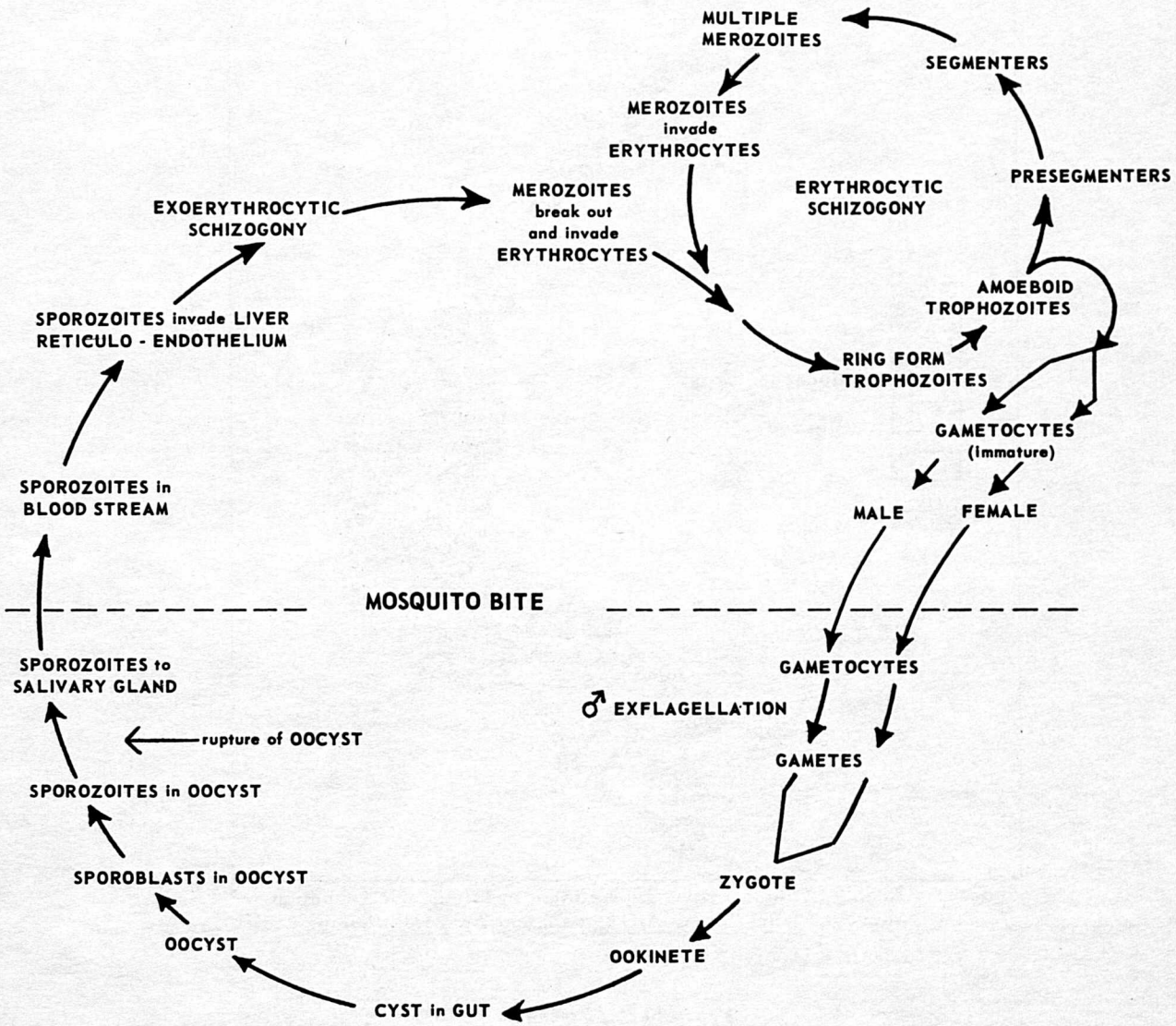
Source: Adapted from Canada, Department of Mines and Technical Surveys, Indo-China, A Geographical Appreciation, p. 21.

(By U.S. Army)

Vegetation of Vietnam.

LIFE CYCLE OF THE MALARIA PARASITE (PLASMODIUM FALCIPARUM)

IN MAN: Endogenous Asexual Cycle
16 – 37 Days (average 22 days)



IN MOSQUITO: Exogenous Sexual Cycle
9 – 30 Days (average in tropics 11 days)

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Prepared by
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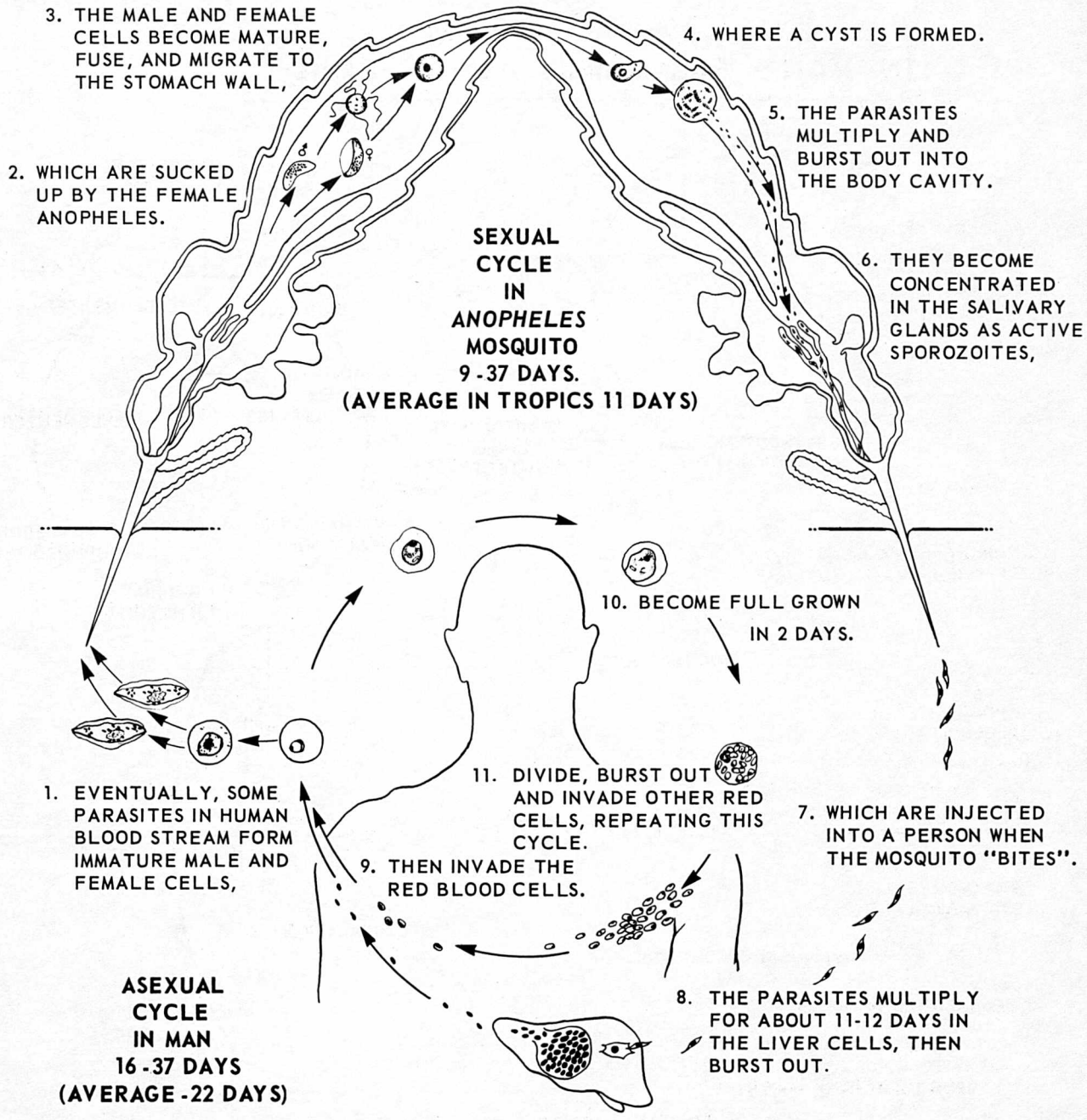
LIFE HISTORY OF THE MALARIA PARASITE (*PLASMODIUM FALCIPARUM*) IN MAN AND THE *ANOPHELES* MOSQUITO



Paul L. Rice and Harold George Scott

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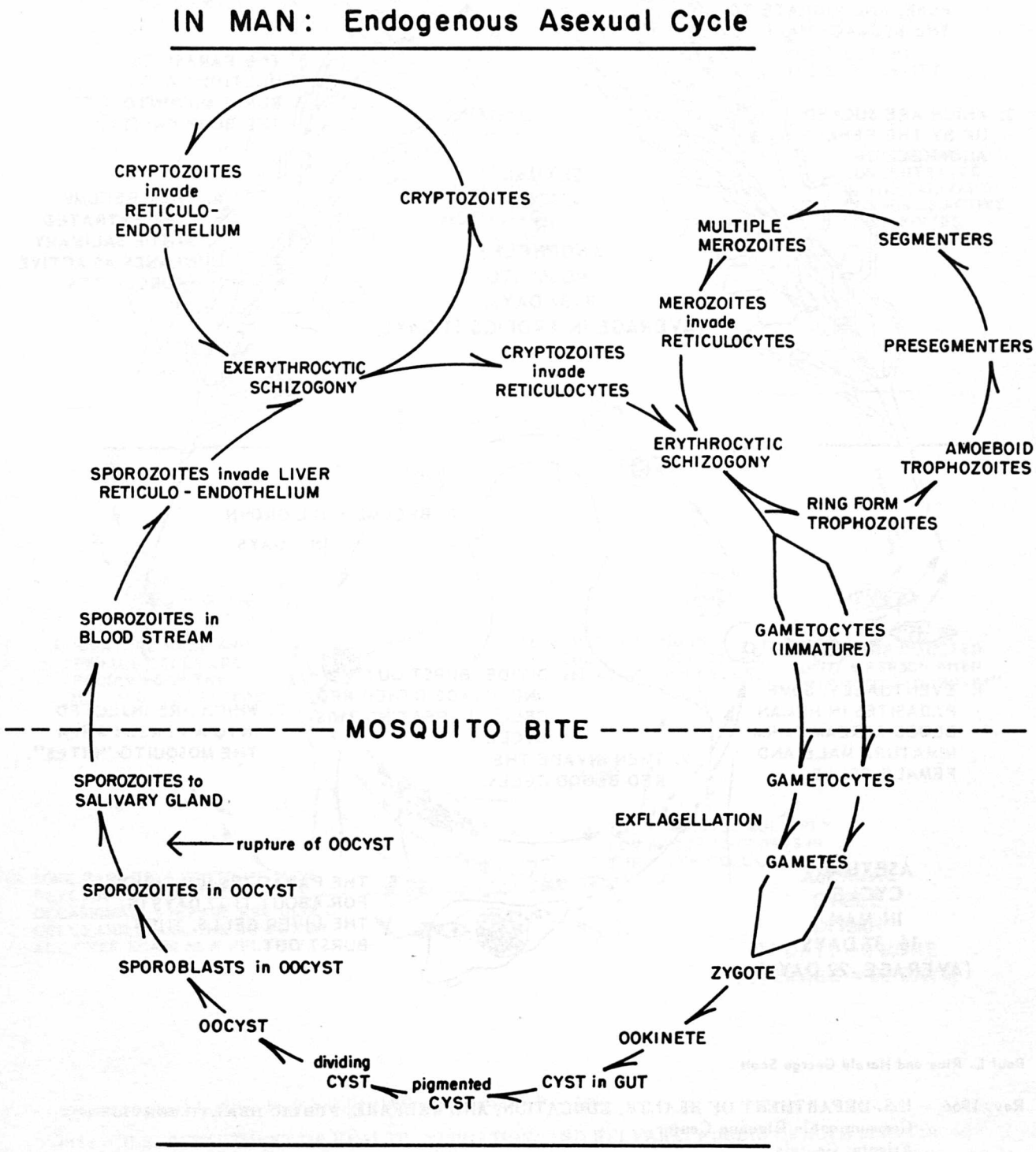
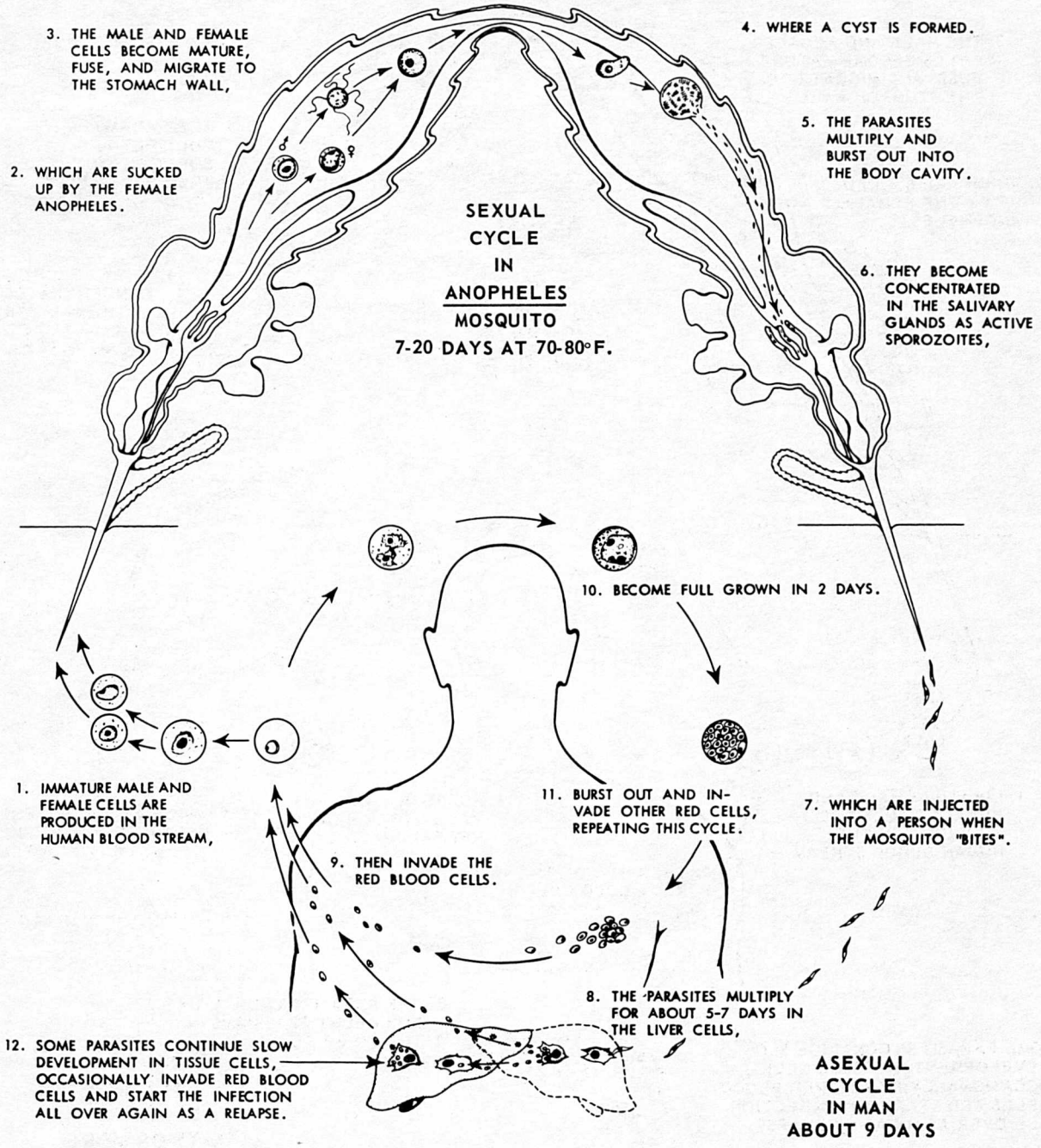
LIFE CYCLE OF THE MALARIA PARASITE
(PLASMODIUM VIVAX)



PREPARED BY
Harold G. Scott
JULY, 1958
DHEW, PHS, BSS, CDC

LIFE HISTORY OF THE MALARIA PARASITE (PLASMODIUM VIVAX) IN MAN AND THE ANOPHELES MOSQUITO



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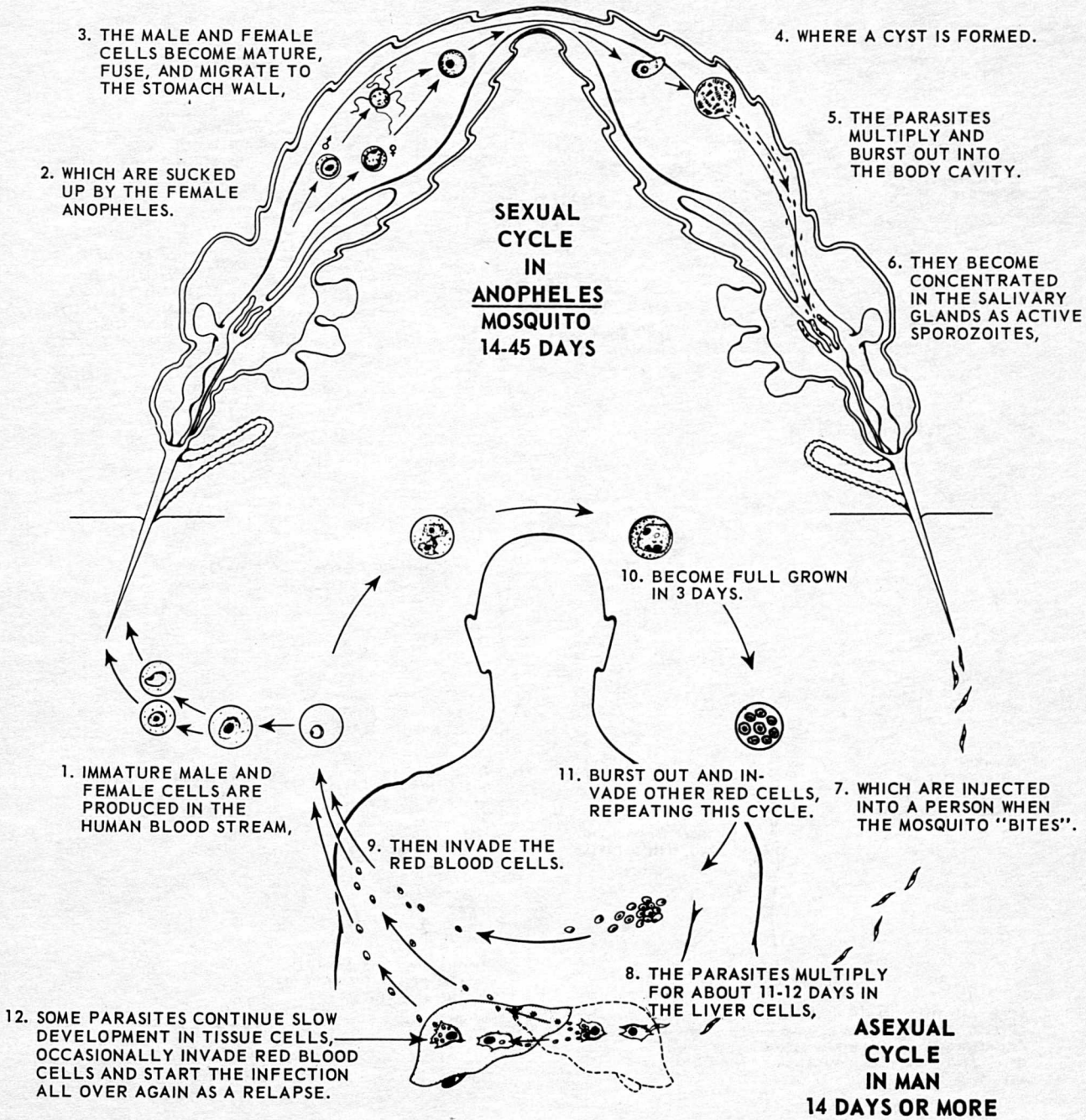
LIFE HISTORY OF THE MALARIA PARASITE (PLASMODIUM MALARIAE) IN MAN AND THE ANOPHELES MOSQUITO



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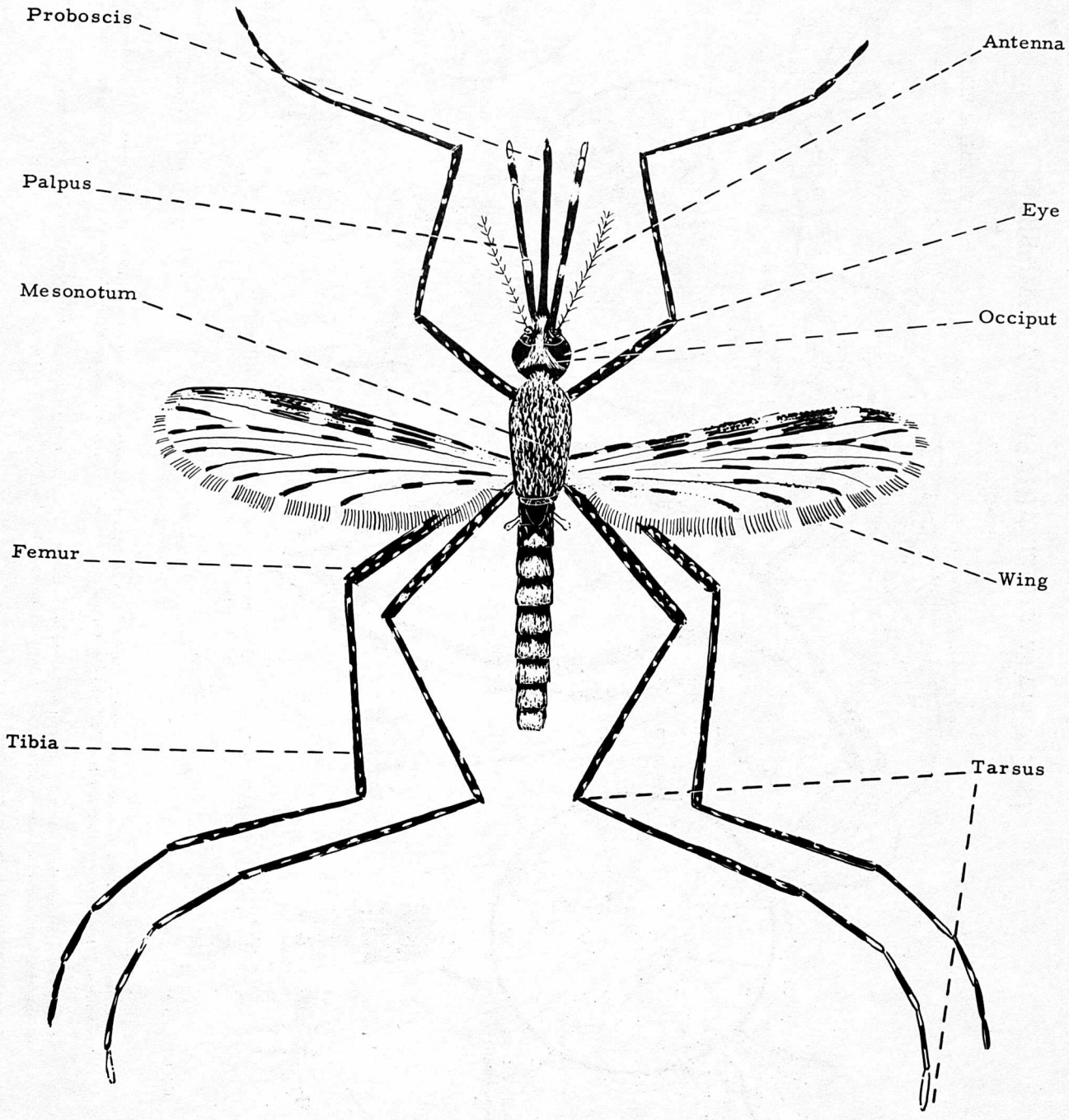
ADULT FEMALE ANOPHELES



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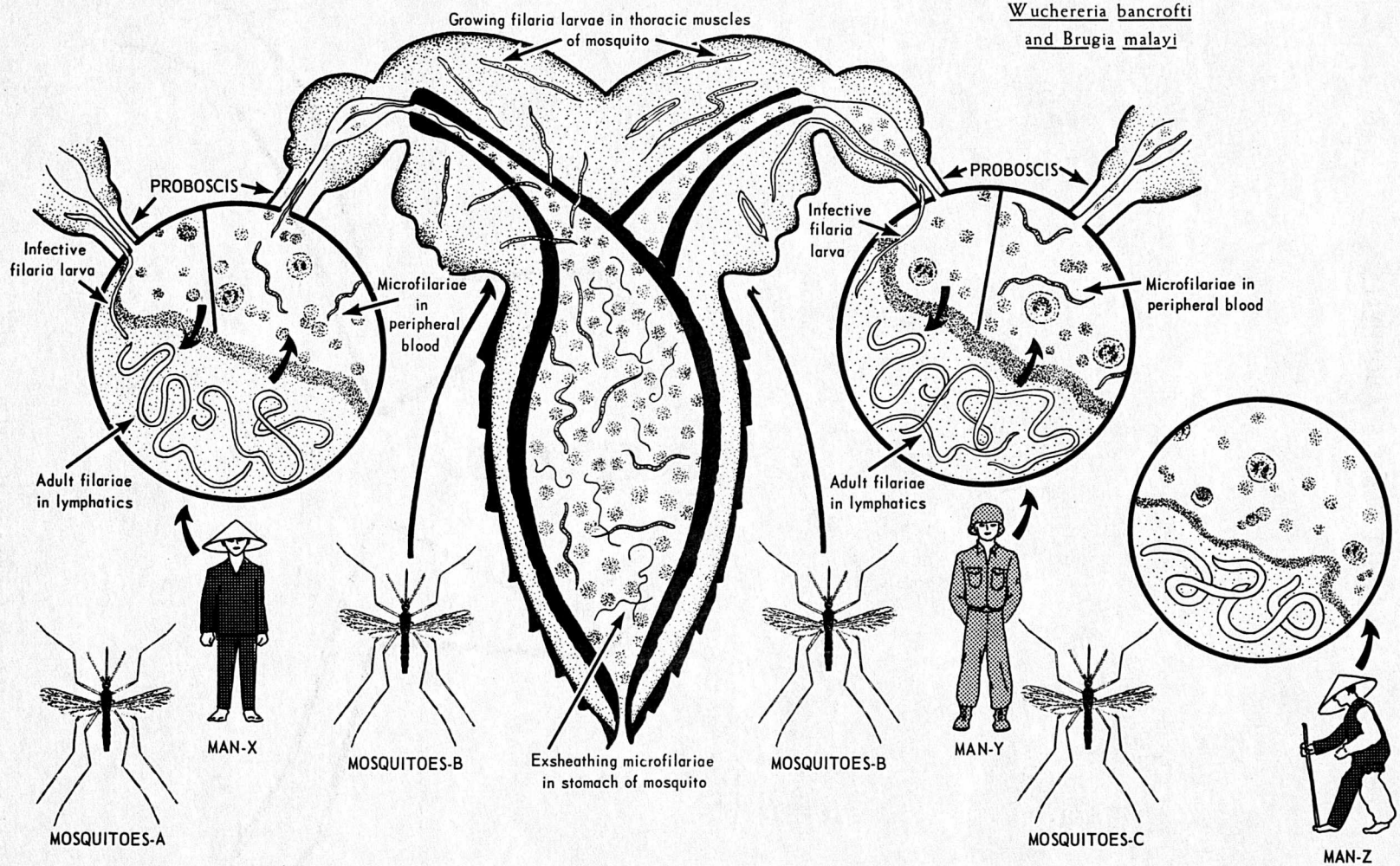
THE CHAIN OF FILARIASIS TRANSMISSION

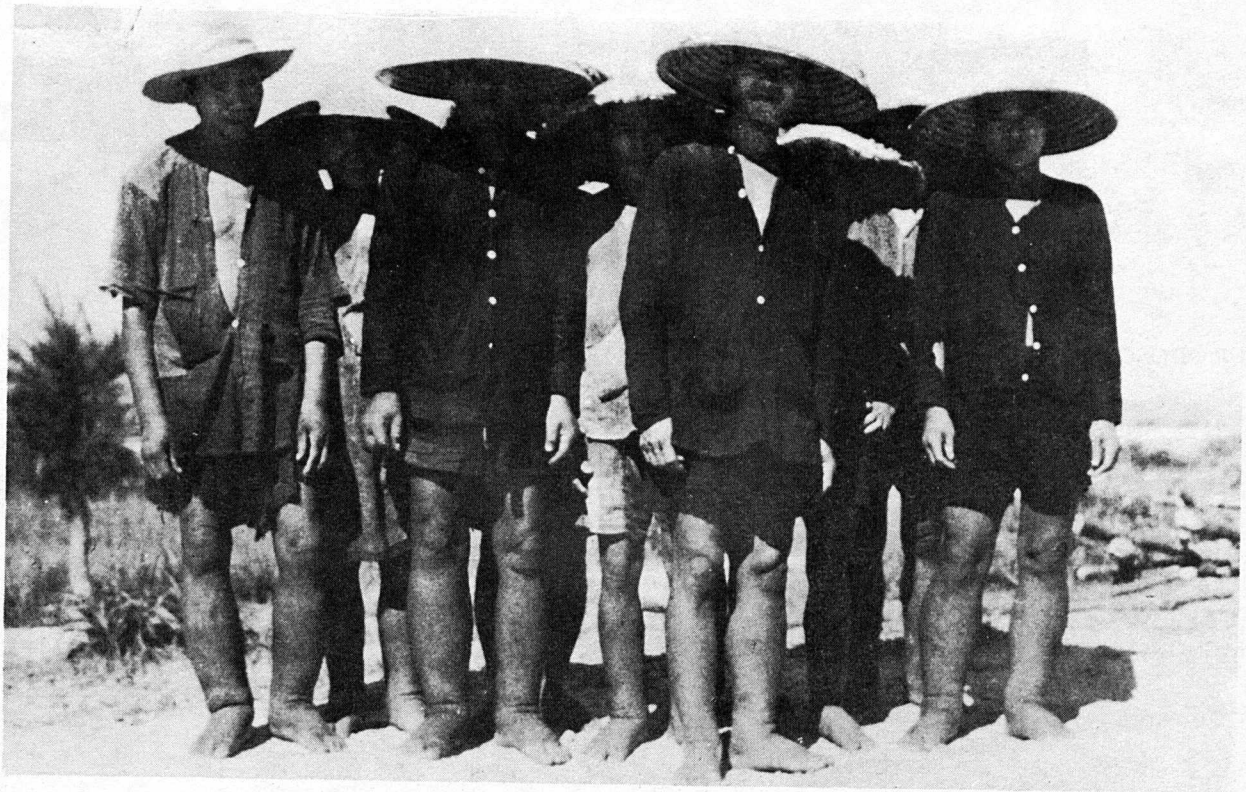
After Menon, 1963



Explanatory notes: –
Infective vector mosquitoes (A) repeatedly inoculate Man "X" who becomes a symptomless microfilaria carrier in about a year or more: he infects numerous vector mosquitoes (B) which in turn inoculate Man "Y" who also becomes a microfilaria carrier and passes on the infection to still more vector mosquitoes (C).

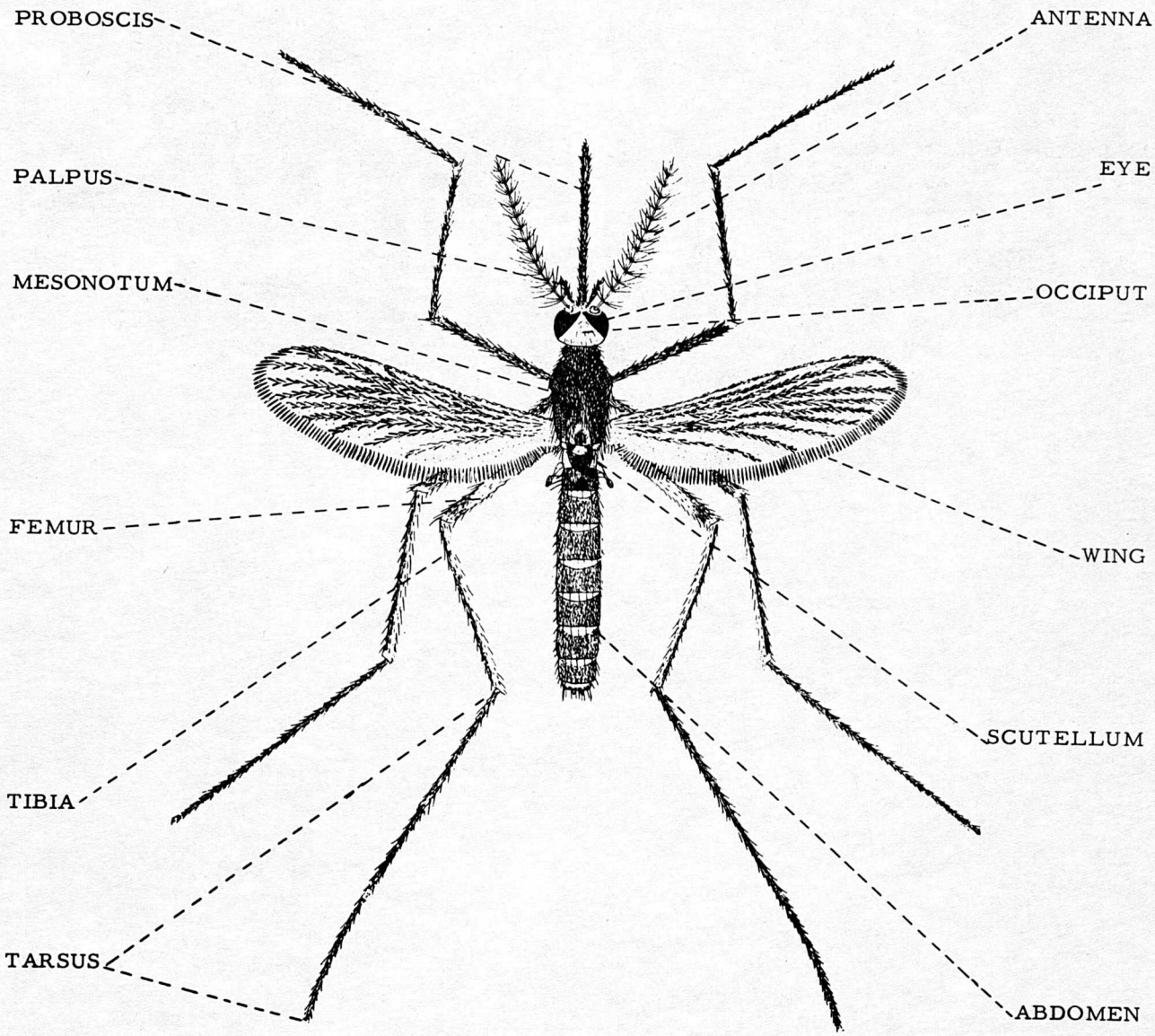
A symptomless carrier (Man "X" or "Y"), continually exposed to further bites of infected vectors, may later develop filarial disease (Man "Z") with the onset of disease, his peripheral blood usually becomes free from microfilariae so that he is no longer a carrier.

Prepared by Harold George Scott, Ph.D., and Margery Borom



FILARIASIS VICTIMS AT DONG HOI

ADULT FEMALE CULEX



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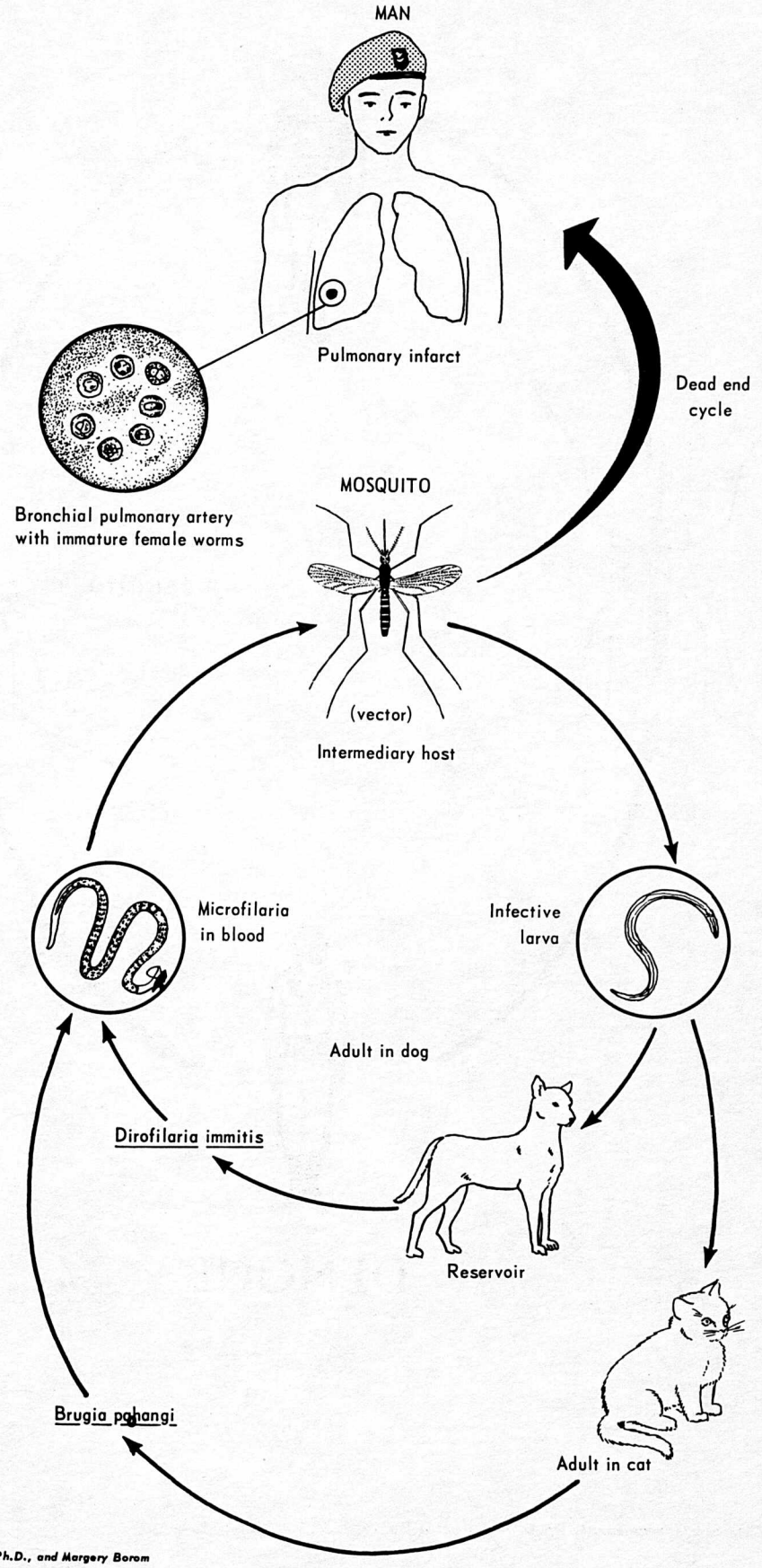
TROPICAL EOSINOPHILIA

After Harrison and Thompson, 1965



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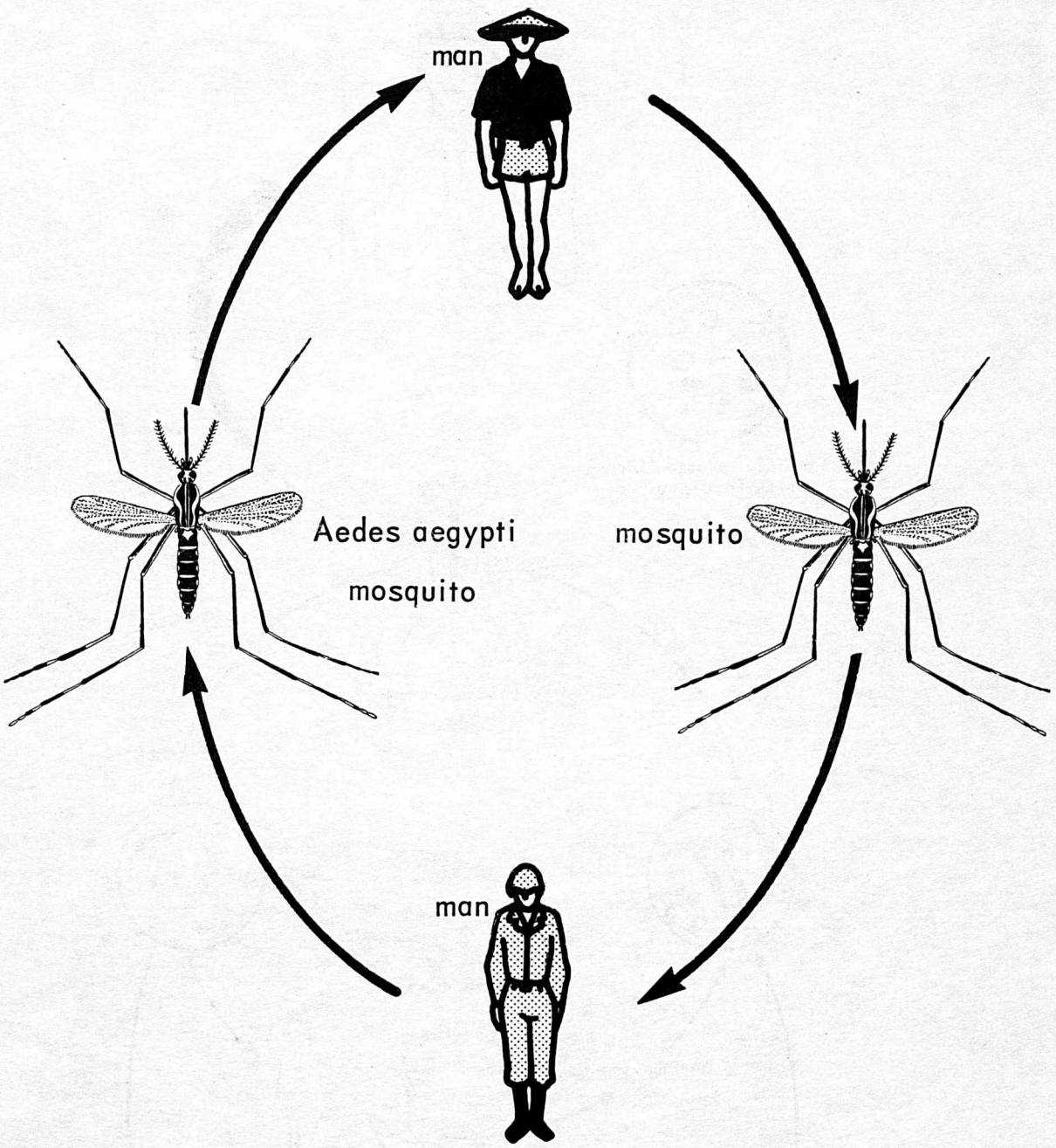

DENGUE

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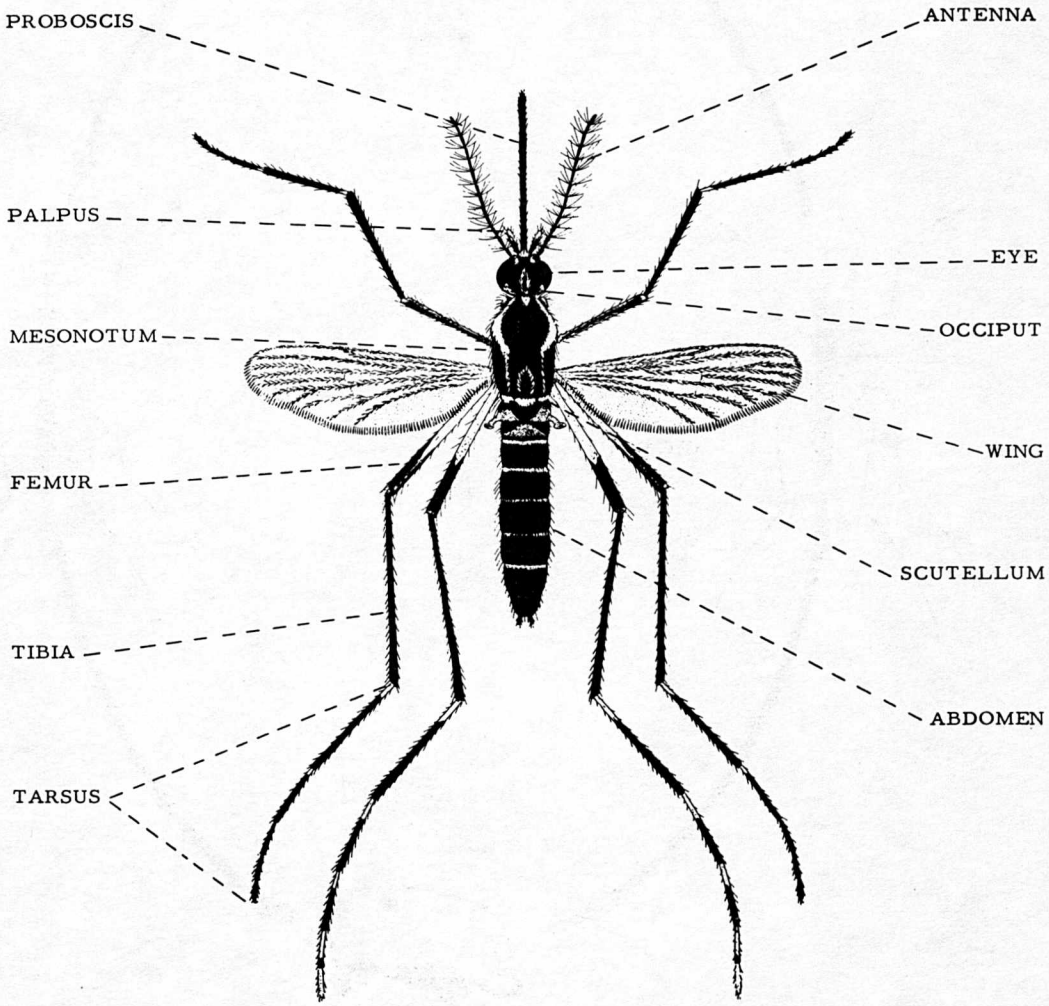
ADULT FEMALE AEDES



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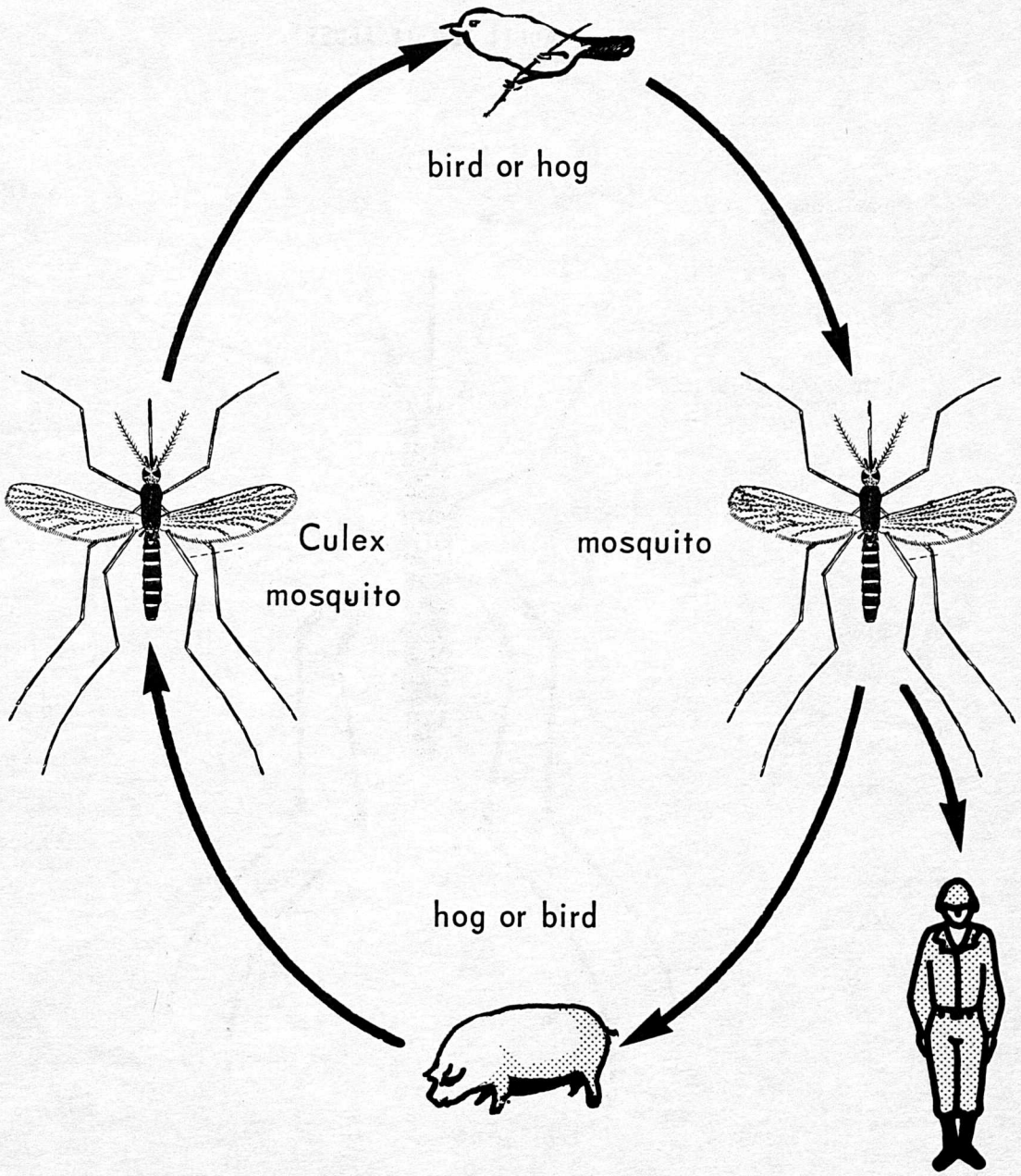

JAPANESE B ENCEPHALITIS

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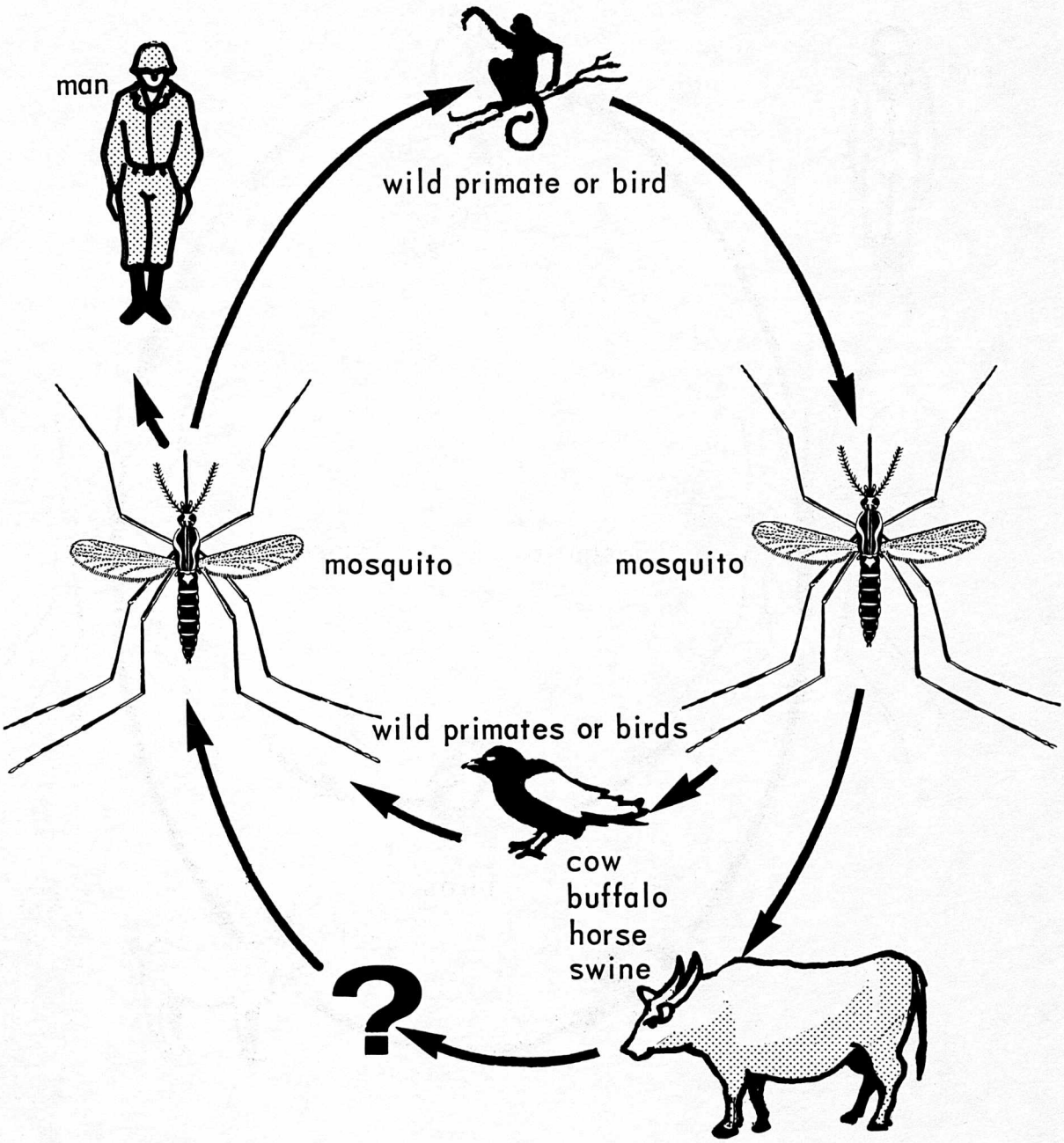

CHIKUNGUNYA FEVER

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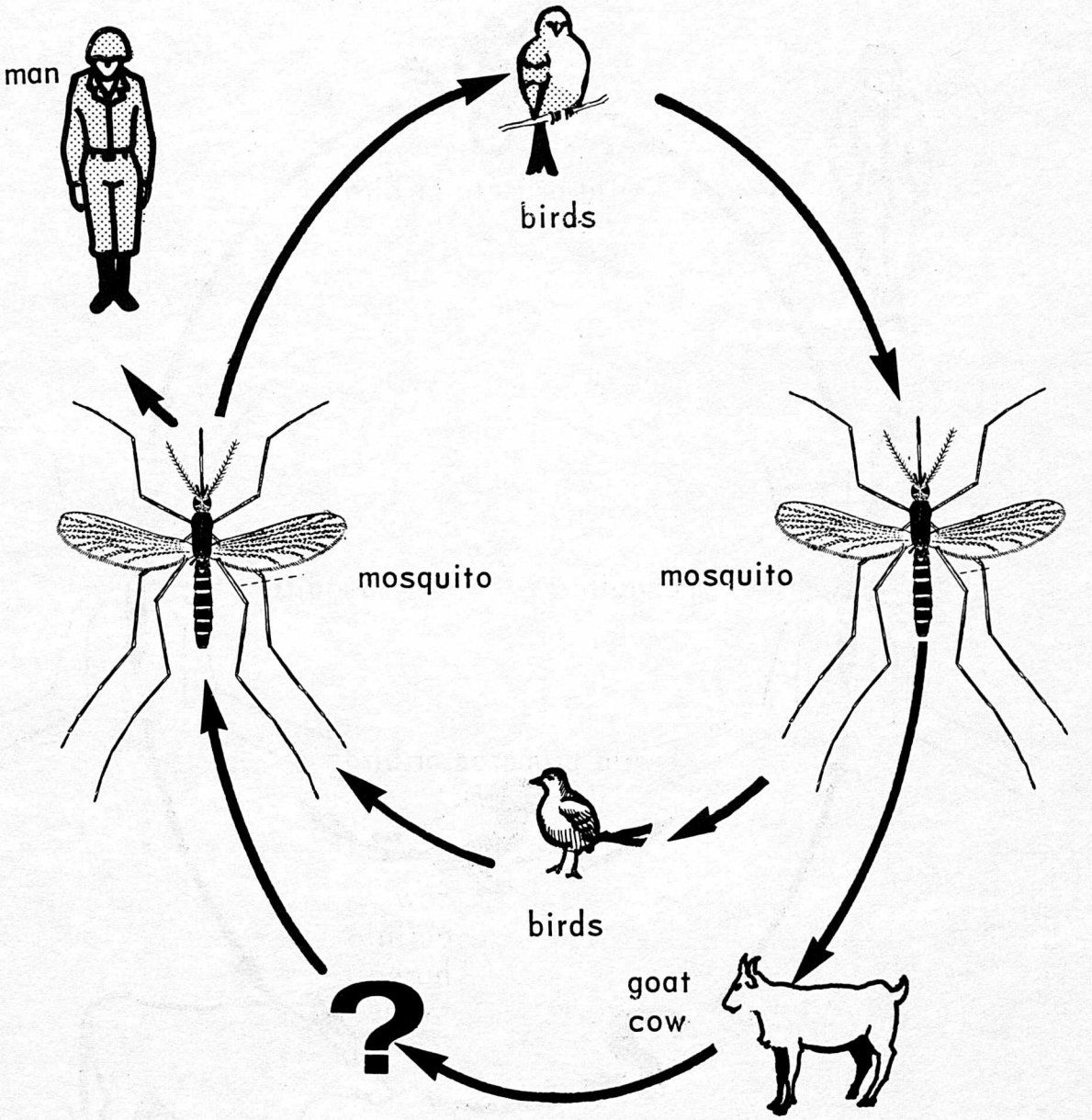

SINDBIS FEVER

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CHECKLIST OF VIETNAMESE MOSQUITOES

Aedes aegypti (Linnaeus, 1757)
Aedes albolineatus (Theobald, 1904)
Aedes albopictus (Skuse, 1894)
Aedes aboscutellatus (Theobald, 1905)
Aedes alongi Galliard and Ngu, 1947
Aedes amesi (Ludlow, 1903)
Aedes andamanensis Edwards, 1922
Aedes annandalei (Theobald, 1910)
Aedes assamensis (Theobald, 1908)
Aedes butleri Theobald, 1901
Aedes caecus (Theobald, 1901)
Aedes cancricomes Edwards, 1922
Aedes chrysolineatus (Theobald, 1907)
Aedes desmotes (Giles, 1904)
Aedes dux Dyar and Shannon, 1925
Aedes edwardsi (Barraud, 1923)
Aedes elsiae (Barraud, 1923)
Aedes gubernatoris (Giles, 1901)
Aedes imprimens (Walker, 1861)
Aedes indosinensis (Borel, 1928)
Aedes khazani Edwards, 1922
Aedes laniger (Wiedemann, 1821)
Aedes lineatopennis (Ludlow, 1905)
Aedes longirostris (Leicester, 1908)
Aedes macfarlanei (Edwards, 1914)
Aedes mediolineatus (Theobald, 1901)
Aedes mediopunctatus (Theobald, 1905)
Aedes niveodes Barraud, 1934
Aedes niveoscutellum (Theobald, 1905)
Aedes niveus (Ludlow, 1903)
Aedes ostentatio (Leicester, 1908)
Aedes poicilius (Theobald, 1903)
Aedes prominens (Barraud, 1923)
Aedes pseudoalbopictus (Borel, 1928)
Aedes saxicola Edwards, 1922
Aedes taeniorhynchoides (Christophers, 1911)
Aedes tonkinensis Galliard and Ngu, 1947
Aedes vexans (Meigen, 1830)
Aedes vigilax (Skuse, 1889)
Aedes vittatus (Bigot, 1861)
Aedomyia catasticta Knab, 1909
Anopheles aconitus Donitz, 1902
Anopheles alongensis Venhuis, 1940
Anopheles annandalei interruptus Puri, 1929
Anopheles annularis Van der Wulp, 1884
Anopheles baezai Gator, 1933
Anopheles balabacensis Baisas, 1936
Anopheles barbirostris Van der Wulp, 1884
Anopheles barbumbrosus Strickland and Chowdhury, 1927
Anopheles bengalensis Puri, 1930
Anopheles campestris Reid, 1962
Anopheles culicifacies Giles, 1901
Anopheles fluviatilis James, 1902
Anopheles gigas baileyi Edwards, 1929
Anopheles indiensis Theobald, 1901
Anopheles insulaeflorum (Swellengrebel and Swellengrebel de Graff, 1919)
Anopheles jamesi Theobald, 1901
Anopheles jeyporiensis candidiensis Koidzumi, 1924
Anopheles jeyporiensis jeyporiensis James, 1902
Anopheles karwari James, 1903
Anopheles kochi Donitz, 1901
Anopheles lesteri Baisas and Hu, 1936
Anopheles lindsayi Giles, 1900
Anopheles litoralis King, 1932
Anopheles maculatus Theobald, 1901
Anopheles minimus Theobald, 1901
Anopheles nigerrimus Giles, 1900
Anopheles pallidus Theobald, 1901
Anopheles peditaeniatus (Leicester, 1908)
Anopheles philippinensis Ludlow, 1902
Anopheles ramsayi Covell, 1927
Anopheles sinensis Wiedemann, 1928
Anopheles sintonoides Ho, 1938
Anopheles splendidus Koidzumi, 1920
Anopheles stephensi Liston, 1901
Anopheles subpictus Grassi, 1899
Anopheles sundaicus Rosenwaldt, 1926
Anopheles tessellatus Theobald, 1901
Anopheles umbrosus Theobald, 1903
Anopheles vagus Donitz, 1902
Anopheles varuna Iyengar, 1924
Armigeres annulitarsis (Leicester, 1908)
Armigeres aureolineatus (Leicester, 1908)
Armigeres cingulatus (Leicester, 1908)
Armigeres dolichocephalus (Leicester, 1908)
Armigeres durhami (Edwards, 1917)
Armigeres flavus (Leicester, 1908)
Armigeres kuchingensis Edwards, 1915
Armigeres longipalpis (Leicester, 1904)
Armigeres magnus (Theobald, 1908)
Armigeres moultoni Edwards, 1914
Armigeres pectinatus (Edwards, 1914)

Armigeres subalbatus (Coquillett, 1908)
Culex annulus Theobald, 1901
Culex bernardi (Borel, 1926)
Culex bitaeniorhynchus Giles, 1901
Culex brevipalpis (Giles, 1902)
Culex cinctellus Edwards, 1922
Culex fragilis Ludlow, 1903
Culex fuscanus Wiedemann, 1820
Culex fuscocephalus Theobald, 1907
Culex gelidus Theobald, 1901
Culex halifaxi Theobald, 1903
Culex infantulus Edwards, 1922
Culex khazani Edwards, 1922
Culex malayi (Leicester, 1908)
Culex mimeticus Noe, 1899
Culex mimulus Edwards, 1915
Culex minor (Leicester, 1908)
Culex minutissimus (Theobald, 1907)
Culex nigropunctatus Edwards, 1926
Culex pallidothorax Theobald, 1905
Culex pipiens Linnaeus, 1758
Culex pseudosinensis Colless, 1955
Culex pseudovishnui Colless, 1957
Culex quadripalpis (Edwards, 1914)
Culex quinquefasciatus Say, 1823
Culex raptor (Edwards, 1922)
Culex rubithoracis (Leicester, 1908)
Culex sinensis Theobald, 1903
Culex sitiens Wiedemann, 1828
Culex tritaeniorhynchus Giles, 1901
Culex viridiventer Giles, 1901
Culex vorax (Edwards, 1921)
Culex whitei Barraud, 1923
Culex whitmorei (Giles, 1904)
Ficalbia chamberlaini (Ludlow, 1904)
Ficalbia hybrida (Leicester, 1908)
Ficalbia luzonensis (Ludlow, 1905)
Ficalbia minima (Theobald, 1901)
Heizmannia communis (Leicester, 1908)
Heizmannia complex (Theobald, 1910)
Hodgesia malayi Leicester, 1908
Malaya genurostris Leicester, 1908
Malaya jacobsoni (Edwards, 1930)
Mansonia annulata Leicester, 1908
Mansonia annulifera (Theobald, 1901)
Mansonia bonneae Edwards, 1930
Mansonia crassipes (Van der Wulp, 1881)
Mansonia dives (Schiner, 1868)
Mansonia indiana Edwards, 1930
Mansonia nigrosignata (Edwards, 1917)
Mansonia ochracea (Theobald, 1903)
Mansonia uniformis (Theobald, 1901)
Orthopodomyia albipes Leicester, 1904
Orthopodomyia andamanensis Barraud, 1934
Orthopodomyia anopheloides (Giles, 1903)
Topomyia gracilis Leicester, 1908
Toxorhynchites albipes (Edwards, 1922)
Toxorhynchites kempi (Edwards, 1921)
Toxorhynchites splendens (Wiedemann, 1819)
Tripteroides aranoides (Theobald, 1901)
Tripteroides powelli (Ludlow, 1909)
Tripteroides proximus (Edwards, 1915)
Tripteroides similis (Leicester, 1908)
Uranotaenia annandalei Barraud, 1926
Uranotaenia bicolor Leicester, 1908
Uranotaenia bimaculata Leicester, 1908
Uranotaenia campestris Leicester, 1908
Uranotaenia edwardsi Barraud, 1926
Uranotaenia hongayi Gaillard and Ngu, 1947
Uranotaenia lateralis Ludlow, 1905
Uranotaenia luteola Edwards, 1934
Uranotaenia macfarlanei Edwards, 1914
Uranotaenia maculipleura Leicester, 1908
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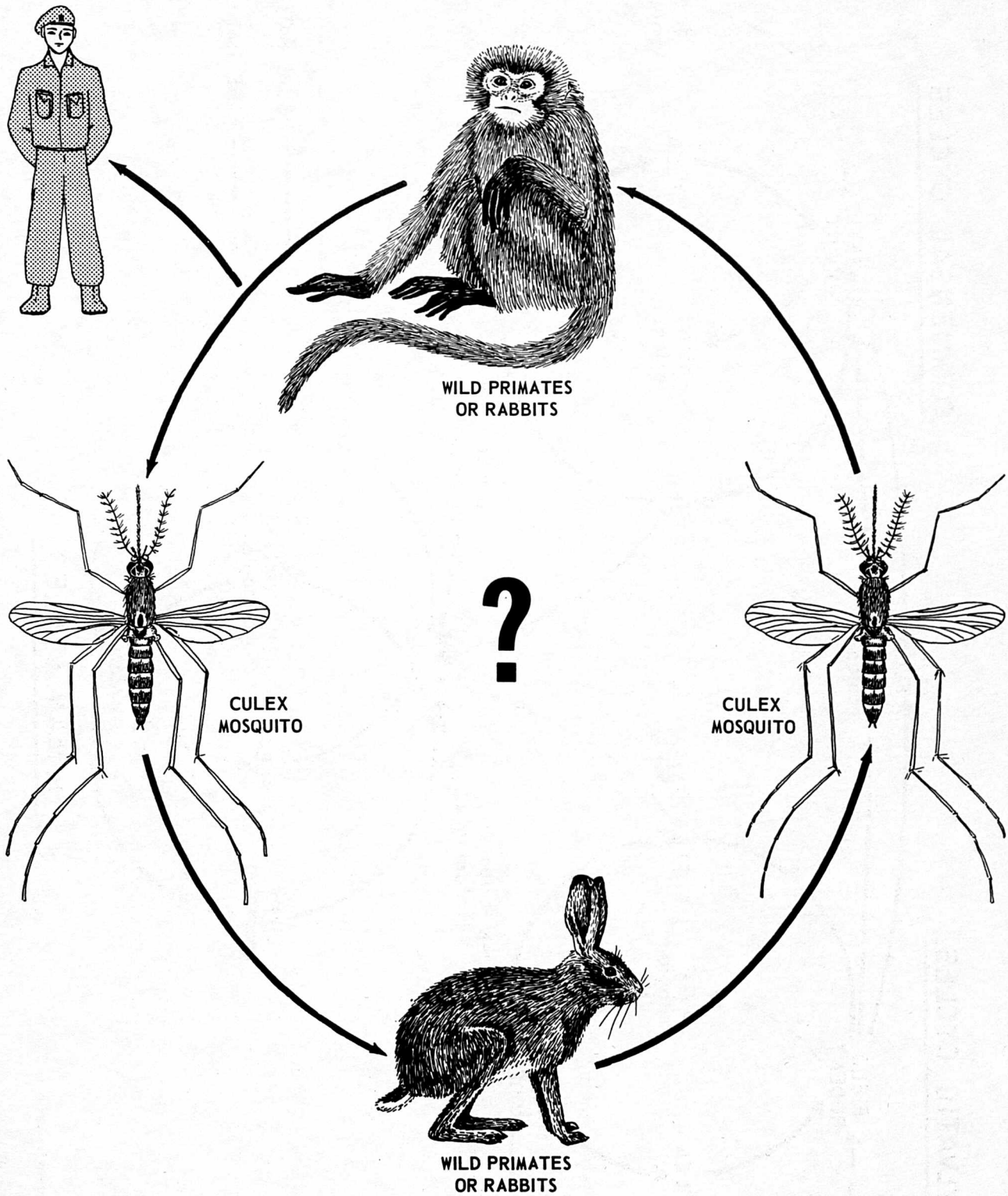
Uranotaenia recondita Edwards, 1922

EPIDEMIOLOGY OF GETAH VIRUS



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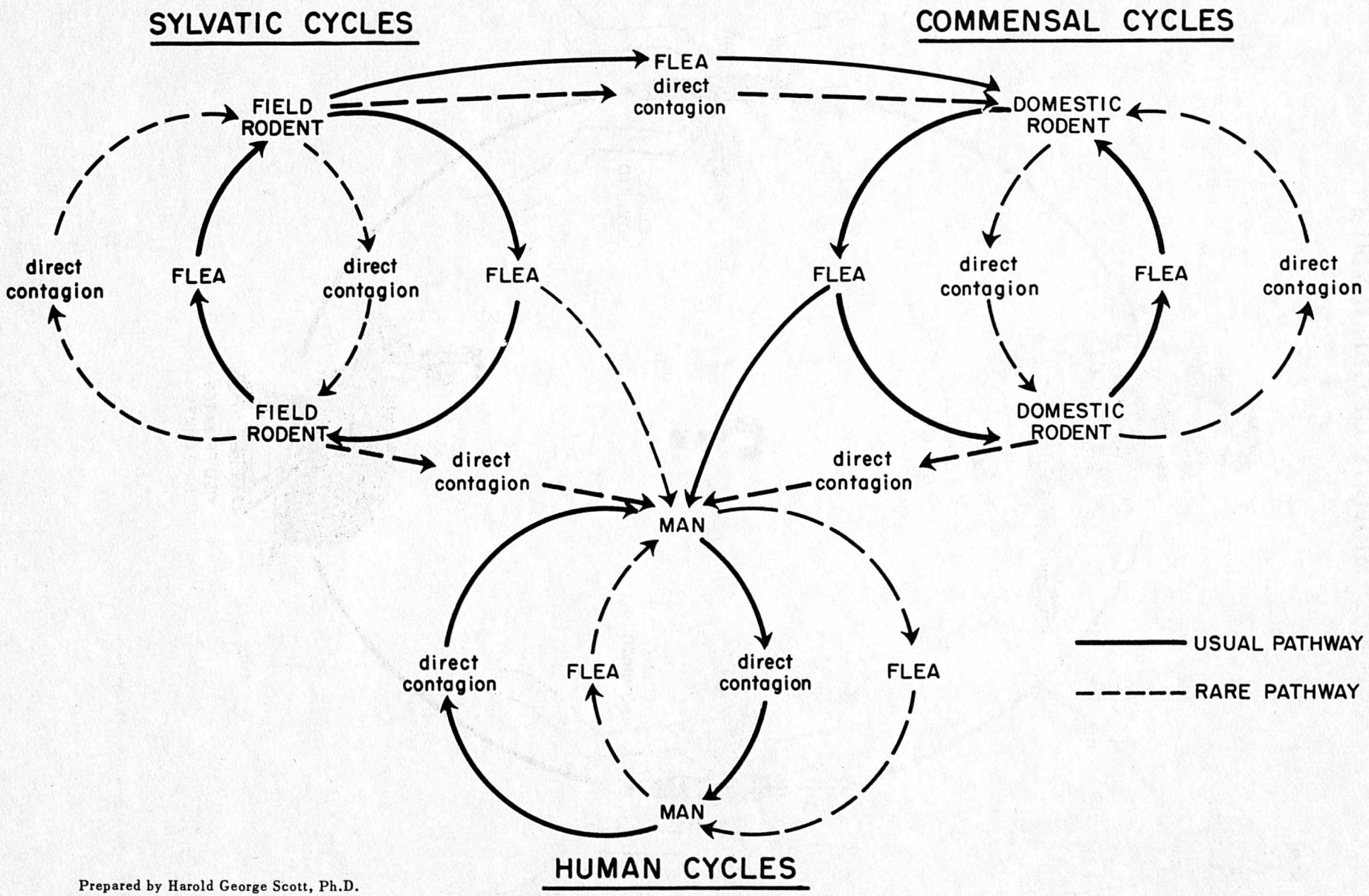
EPIDEMIOLOGY OF PLAGUE



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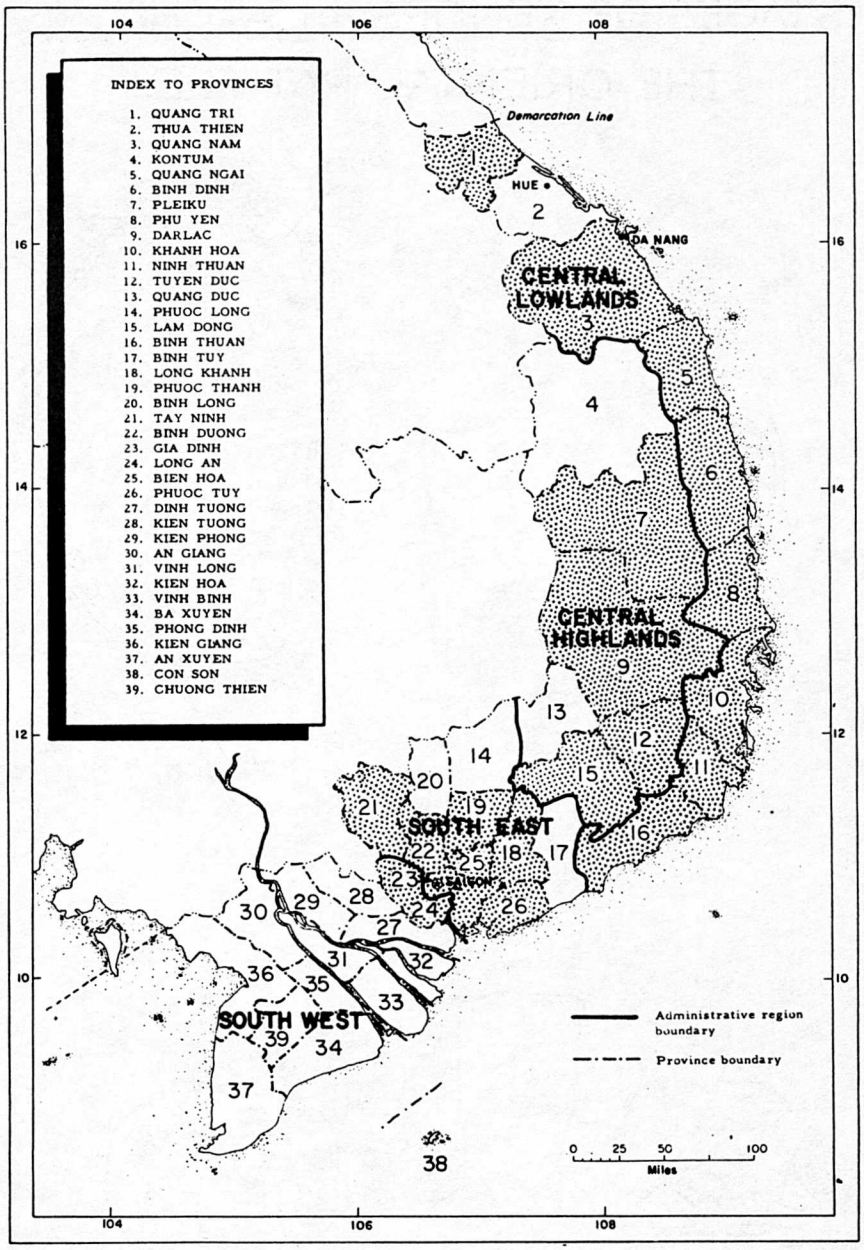
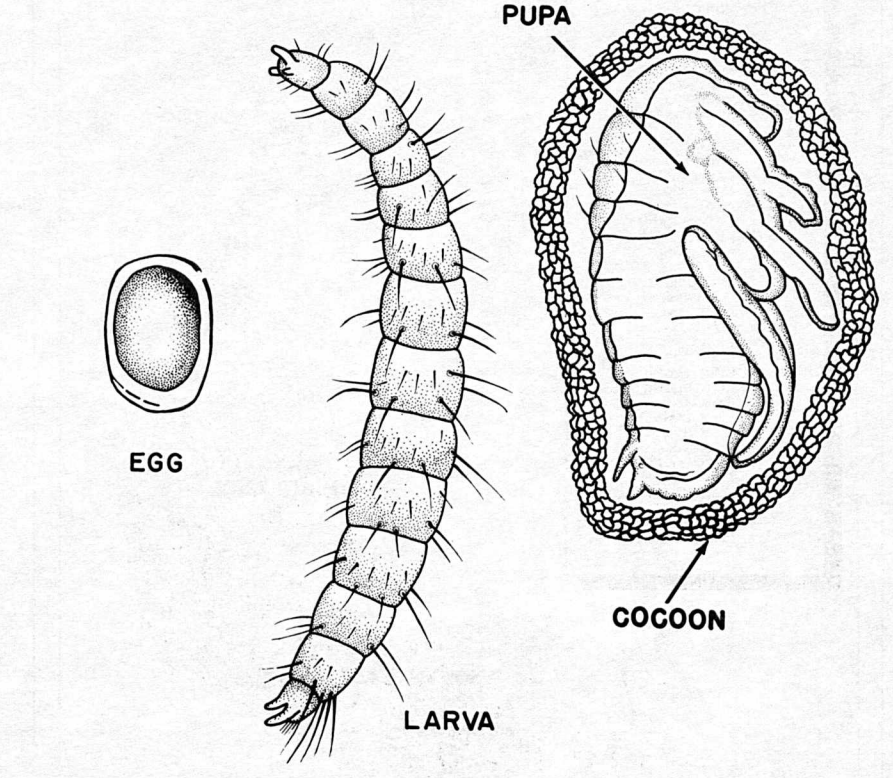
DHEW-PHS-BSS-CDC

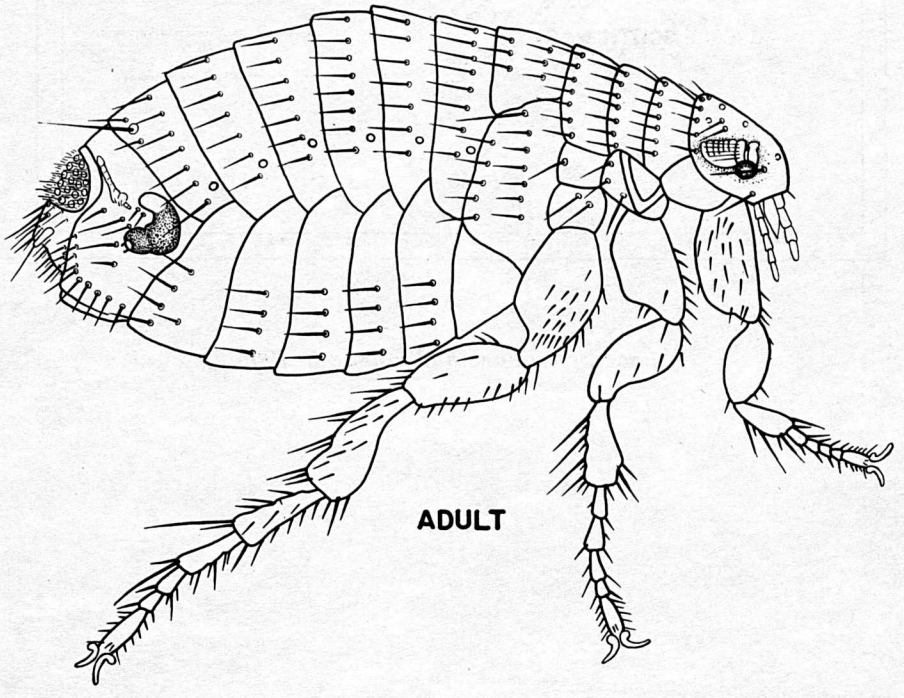
ATLANTA, GA. NOV., 1958 59-162



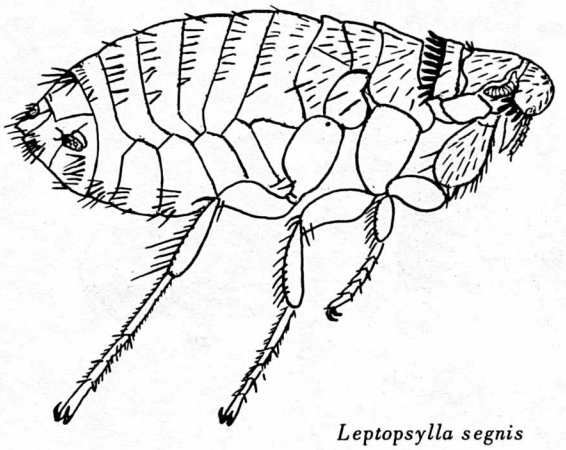
Shaded provinces had plague in 1965.

STAGES OF XENOPSYLLA CHEOPIS
THE ORIENTAL RAT FLEA

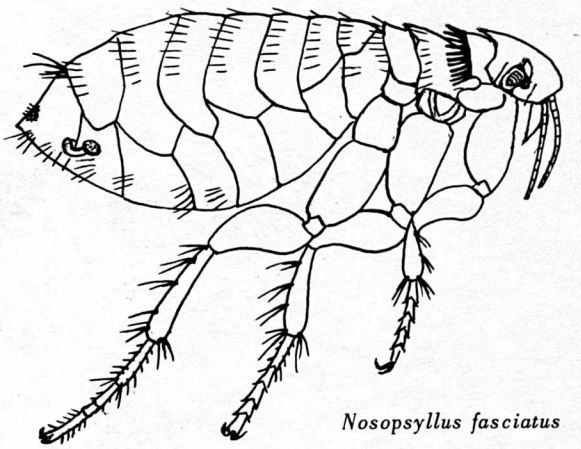




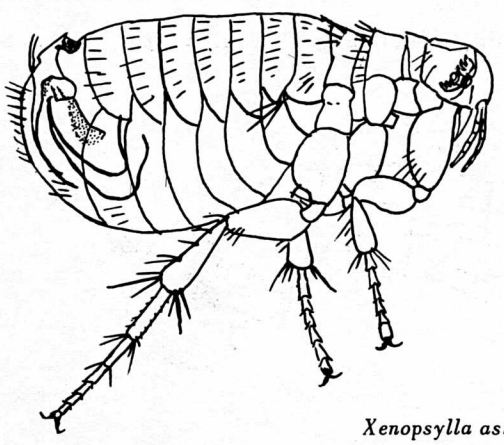
VIETNAMESE FLEAS



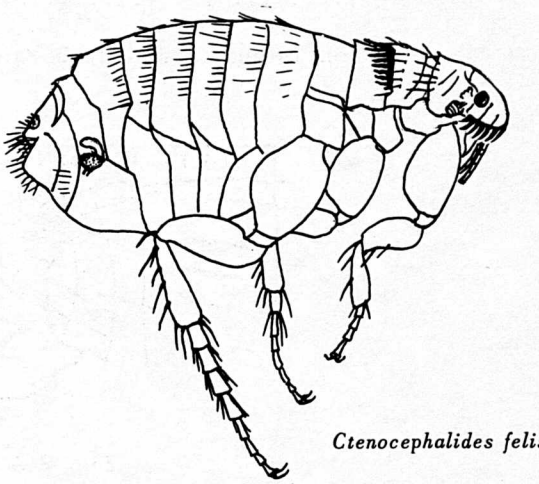
Leptopsylla segnis



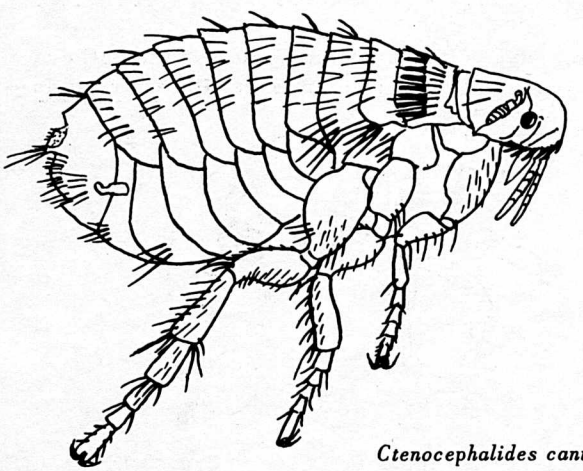
Nosopsyllus fasciatus



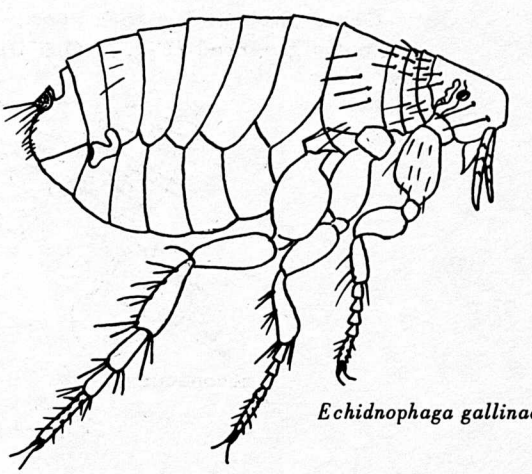
Xenopsylla astia



Ctenocephalides felis



Ctenocephalides canis



Echidnophaga gallinacea

Prepared by Harold George Scott, Ph.D. and Margery Borom – 1966

KEY TO SOME COMMON FLEAS OF VIETNAM
Harold George Scott, Ph.D. – 1966

1. Pronotal and genal combs absent (Fig. 1 A)..... 2

   Pronotal comb present; genal comb present or absent (Fig. 1 B & C)..... 5

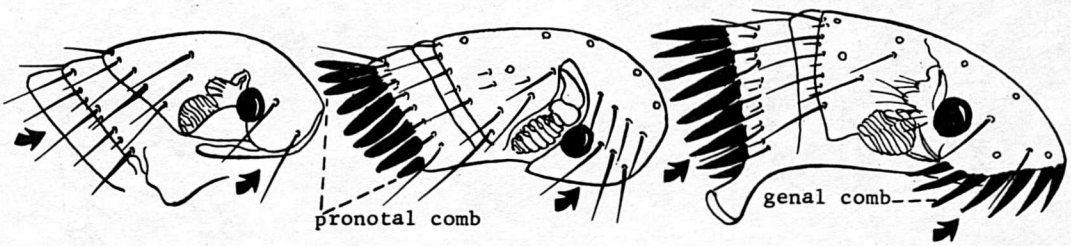


Fig. 1 A Fig. 1 B Fig. 1 C

2. Front of head squared; thorax shorter than first abdominal tergite (Fig. 2 A)..... ..... Sticktight Flea Echidnophaga gallinacea

   Front of head rounded; thorax longer than the first abdominal tergite (Fig. 2 B)..... 3

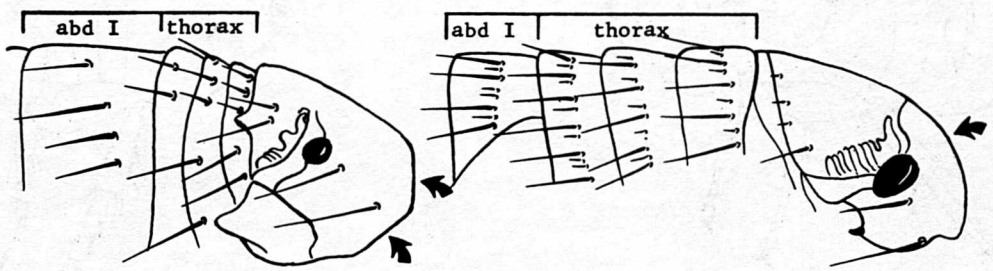


Fig. 2 A Fig. 2 B

3. Ocular bristle in front of eye; mesopleuron divided by internal sclerotization; female spermatheca partially pigmented (Fig. 3 A & B)..... 4

   Ocular bristle beneath eye; mesopleuron without internal sclerotization; female spermatheca not pigmented (Fig. 3 C & D)..... Human Flea Pulex irritans

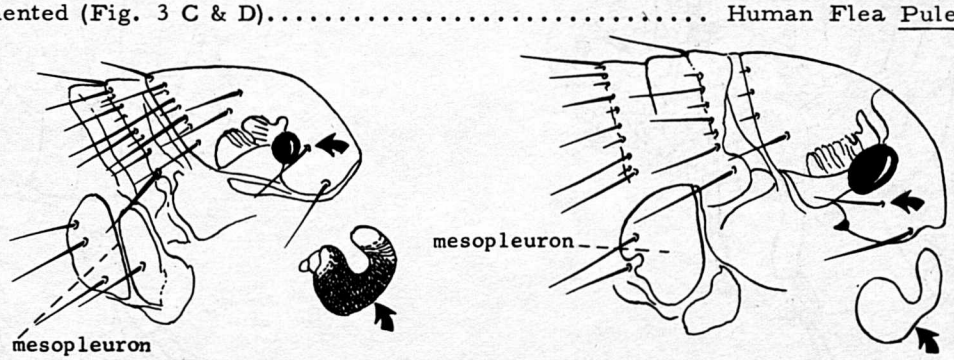


Fig. 3 A Fig. 3 B Fig. 3 C Fig. 3 D

Adapted from Harry D. Pratt and C. J. Stojanovich 1960.

4. Finger of male terminalia expanded (Fig. 4 A); spermatheca of female as in figure 4 B.... ..... Xenopsylla cheopis

Finger of male terminalia not expanded (Fig. 4 C); spermatheca of female as in figure 4 D ..... Xenopsylla astia

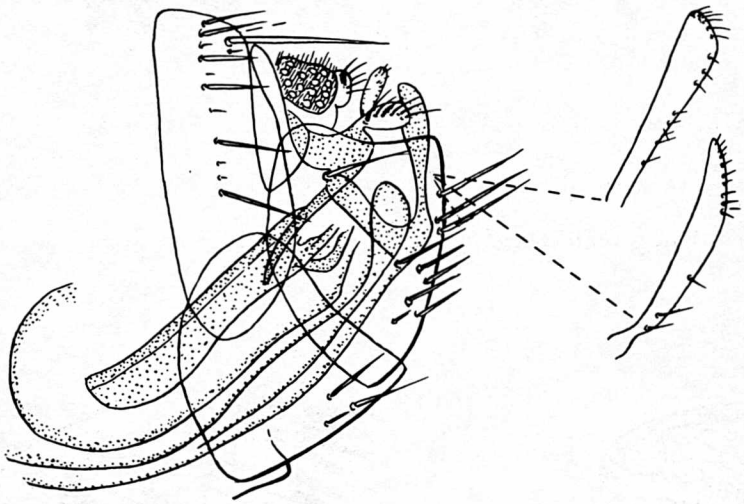


Fig. 4 A

Fig. 4 C

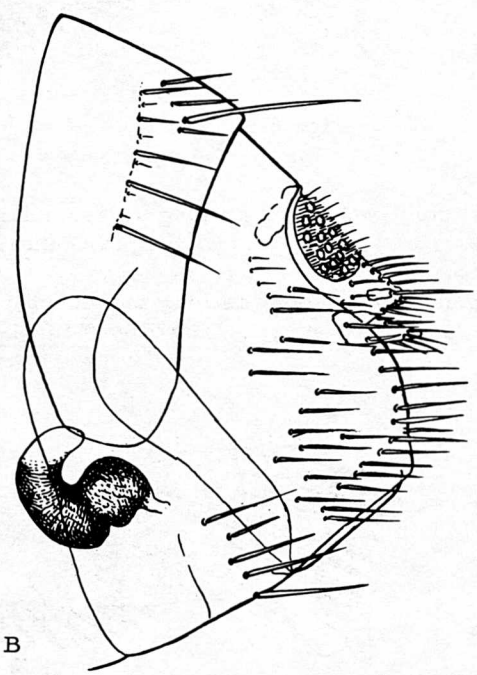


Fig. 4 B

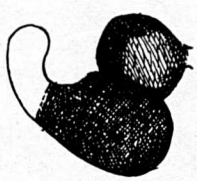


Fig. 4 D

5. Genal comb absent (Fig. 5 A)..... Northern Rat Flea Nosopsyllus fasciatus

Genal comb present (Fig. 5 B)..... 6

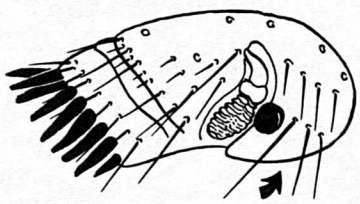


Fig. 5 A

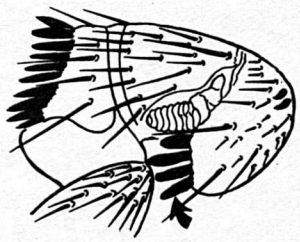


Fig. 5 B

6. Genal comb with 4 teeth (Fig. 6 A)..... Mouse Flea Leptopsylla segnis

Genal comb with more than 5 teeth (Fig. 6 B)..... 7

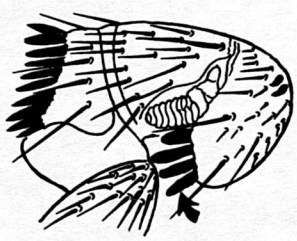


Fig. 6 A

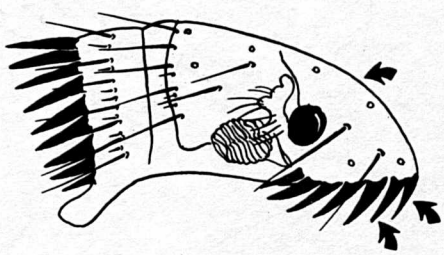


Fig. 6 B

7. Head strongly rounded; first spine of genal comb about 1/2 as long as second spine (Fig. 7 A) ..... Dog Flea Ctenocephalides canis

Head not strongly rounded; first spine of genal comb about as long as second spine (Fig. 7 B) ..... Cat Flea Ctenocephalides felis

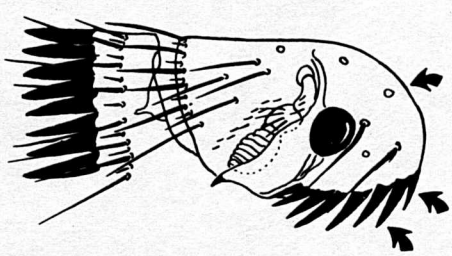


Fig. 7 A

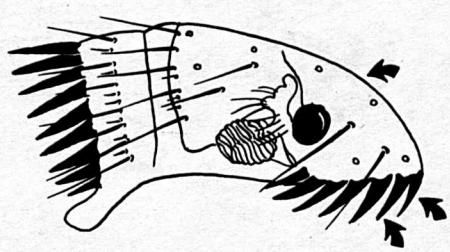
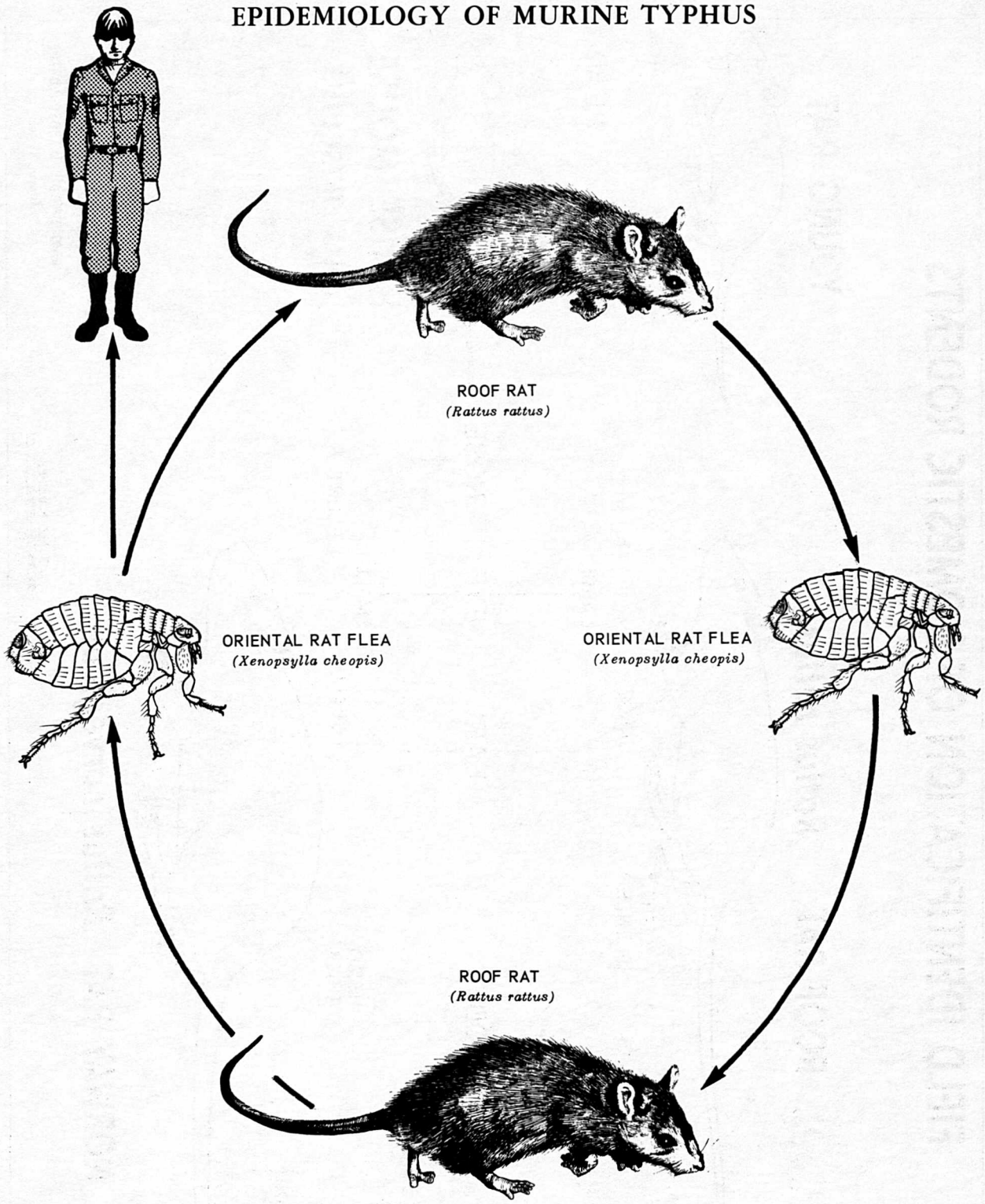


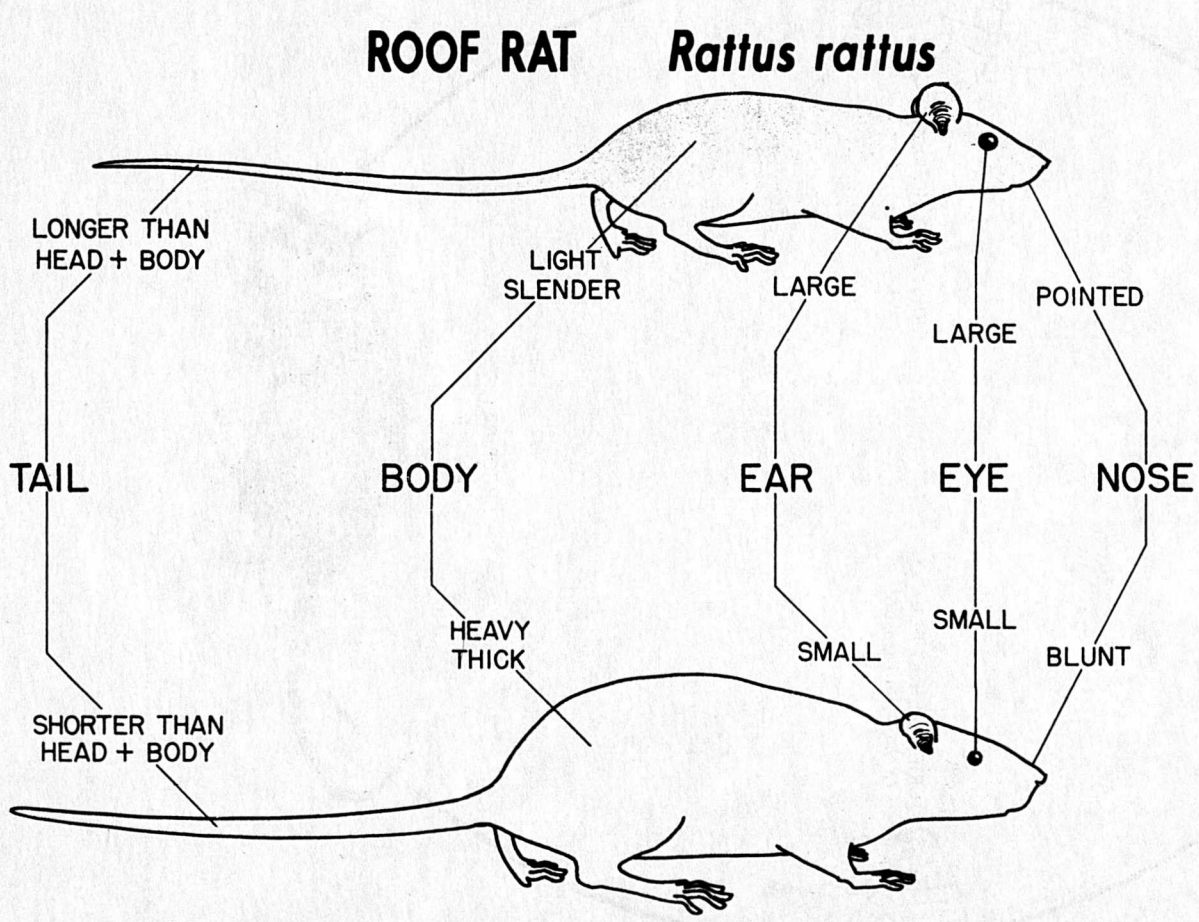
Fig. 7 B

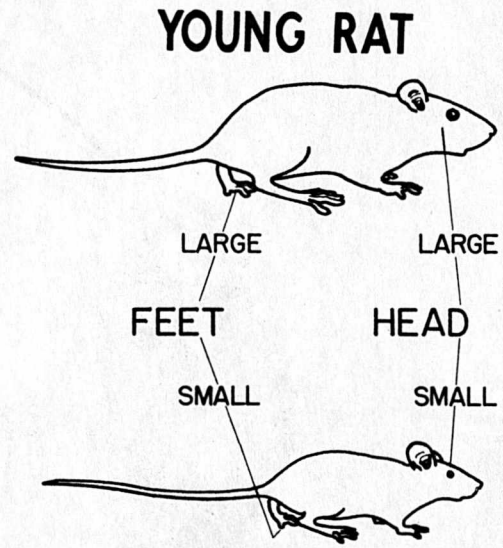
EPIDEMIOLOGY OF MURINE TYPHUS



Prepared by Harold George Scott, Ph.D. and Hector Bourg, B.F.A. – 1966

FIELD IDENTIFICATION OF DOMESTIC RODENTS

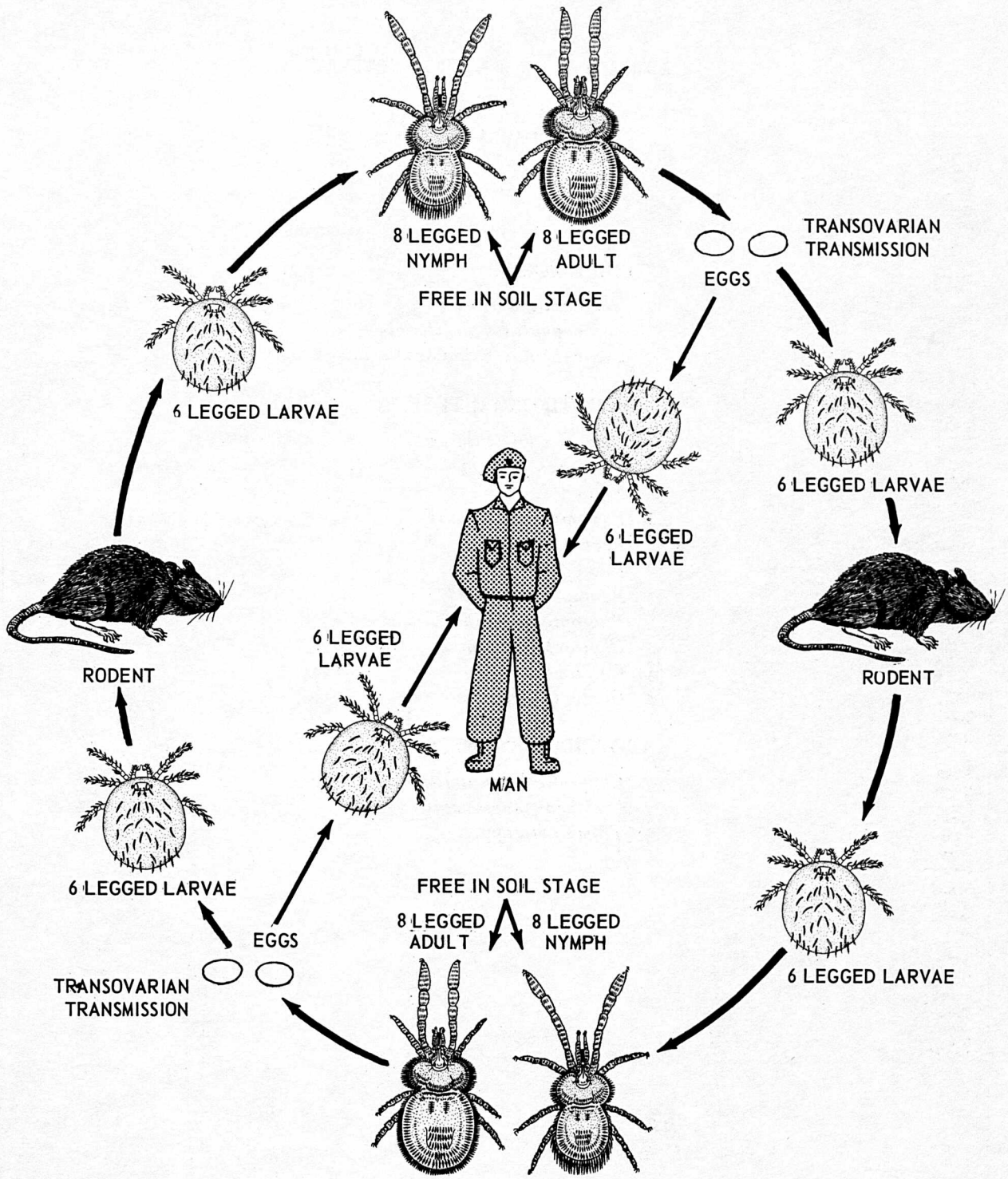




SCALE IN INCHES
0 1 2 3

PREPARED BY R. Z. BROWN
U.S. Department of
HEALTH, EDUCATION, AND WELFARE
Public Health Service
Communicable Disease Center
Atlanta, Georgia
SEPT., 1953

EPIDEMOLOGY OF SCRUB TYPHUS



Prepared by Harold George Scott, Ph.D. and Margery Borom – 1966

SOME MITES KNOWN FROM VIETNAM

Harold George Scott
29 April 1966

TONGUE-WORMS

Linguatula serrata
Porocephalus moniliformis
Porocephalus najae sputatricis

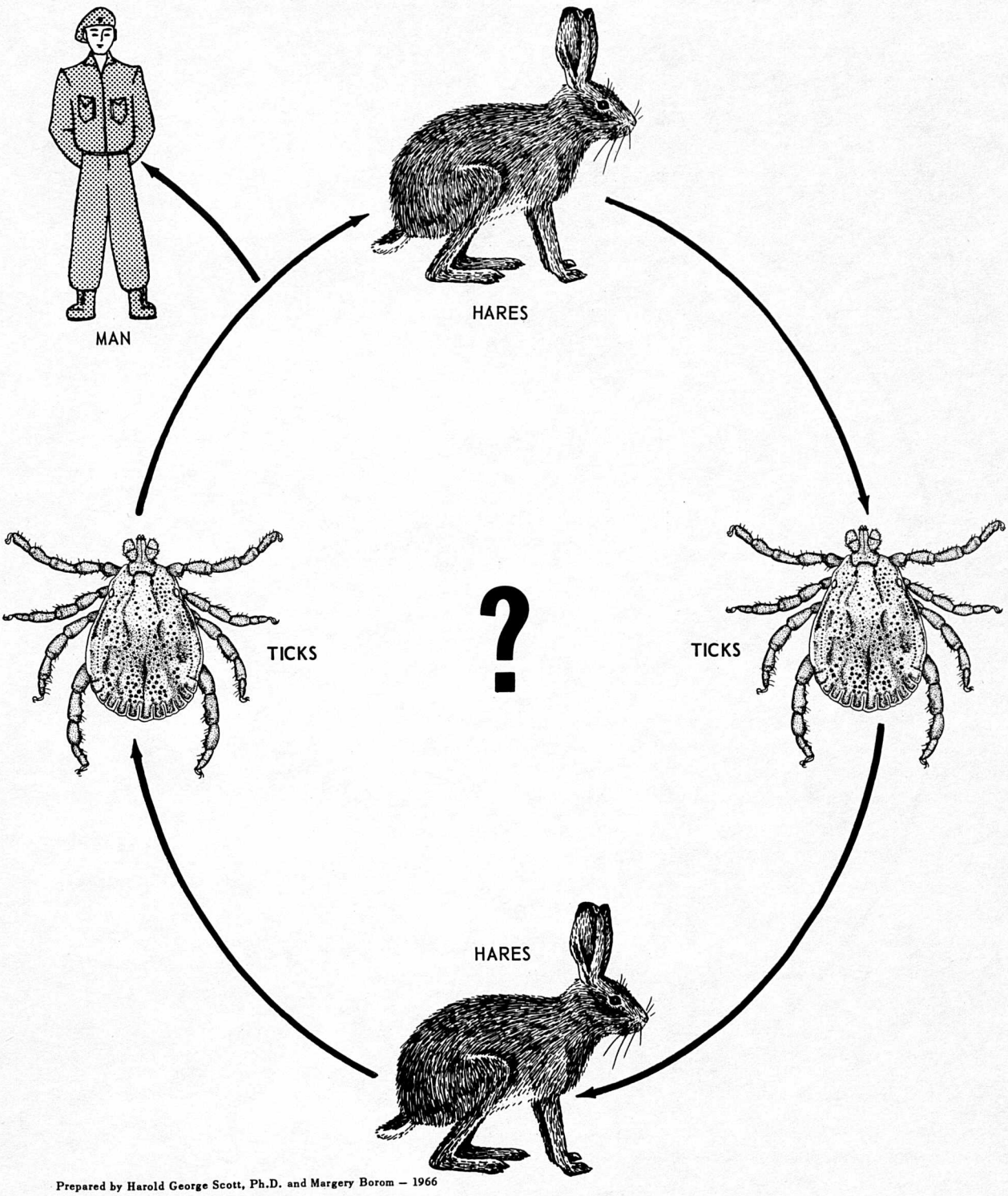
SARCOPTIFORM MITES

Demodex folliculorum
Sarcoptes scabiei
Notoedres cati
Psoroptes natalensis
Psoroptes ovis
Psoroptes equi
Psoroptes bovis
Psoroptes cuniculi
Chorioptes caprae
Chorioptes equi
Otodectes cynotis

TROMBIDIFORM MITES

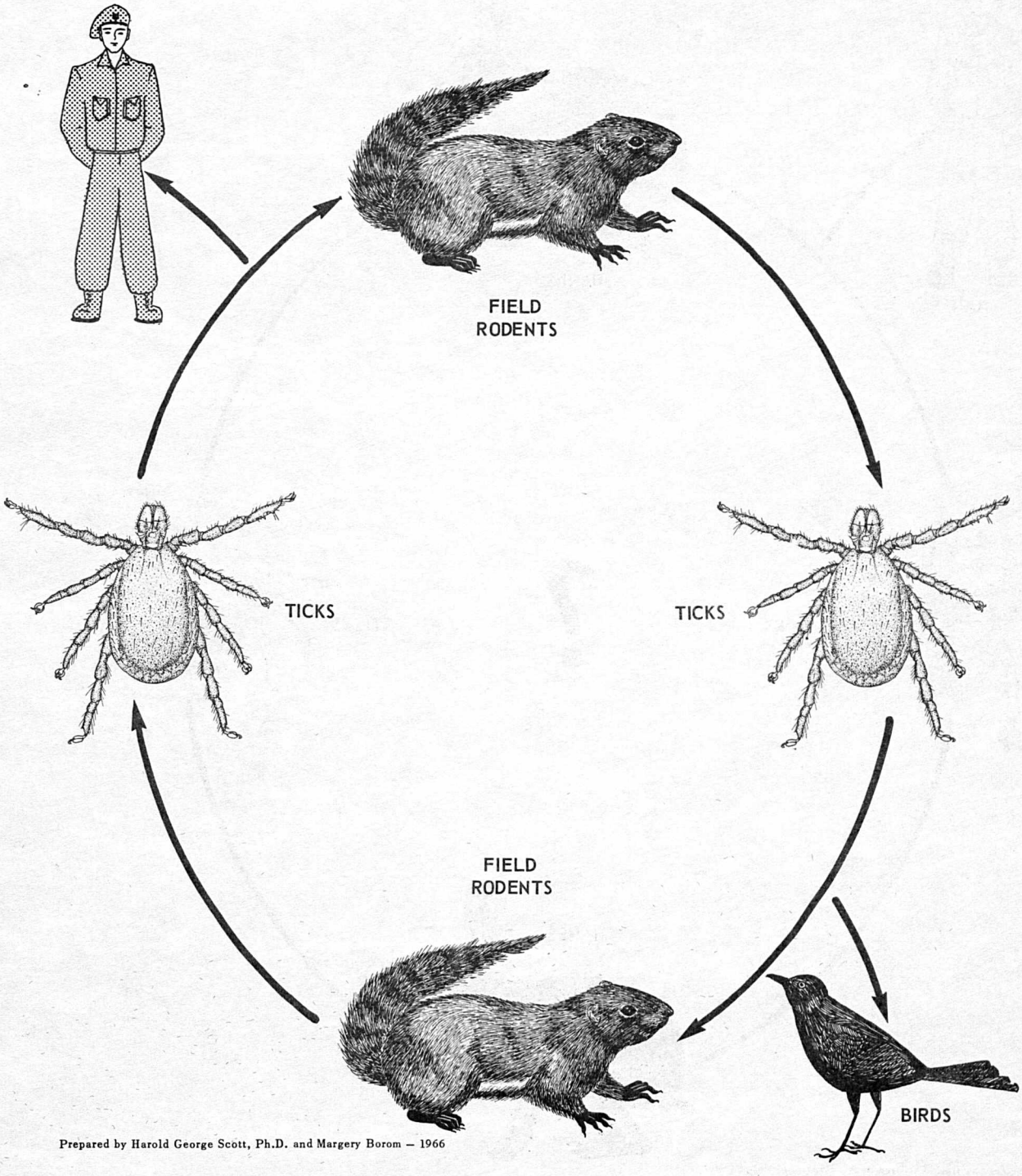
Cheyletiella parasitivorax
Ornithonyssus bacoti
Trombicula spp.

EPIDEMIOLOGY OF TICK-BORNE TYPHUS



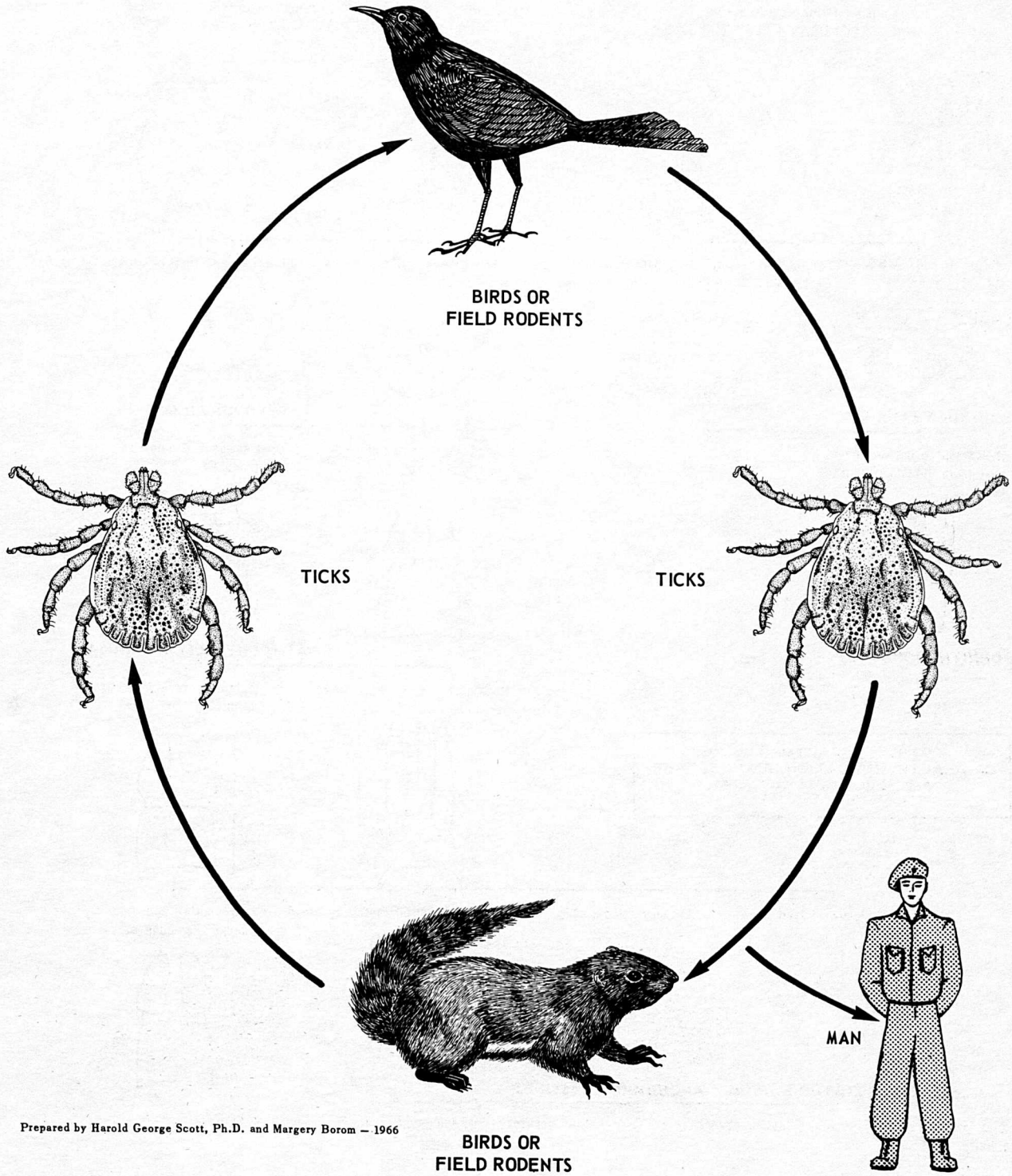
Prepared by Harold George Scott, Ph.D. and Margery Borom — 1966

EPIDEMIOLOGY OF RUSSIAN SPRING-SUMMER ENCEPHALITIS



Prepared by Harold George Scott, Ph.D. and Margery Borom – 1966

EPIDEMIOLOGY OF LANGAT FEVER

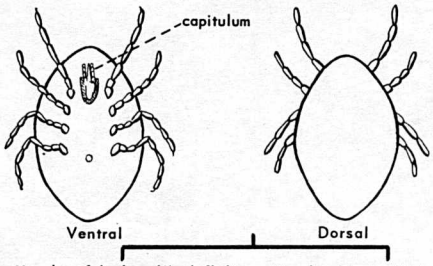


Prepared by Harold George Scott, Ph.D. and Margery Borom – 1966

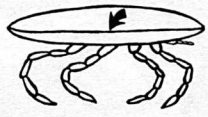
KEY TO SOME ADULT TICKS OF VIETNAM

Harold George Scott, Ph.D.

Capitulum inferior; scutum absent
FAMILY ARGASIDAE – SOFT TICKS

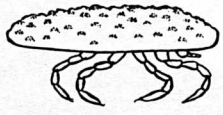


Margin of body with definite sutural line.



ARGAS PERSICUS

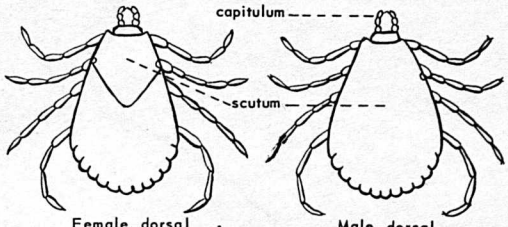
Margin of body thick, rounded, without definite sutural line.



Hypostome with well developed teeth, Integument mamillated.

***ORNITHODOROS* SPP.**

Capitulum anterior; scutum present
FAMILY IXODIDAE – HARD TICKS

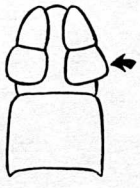


Anal groove either behind anus, indistinct, or absent.

Anal groove in front of anus.

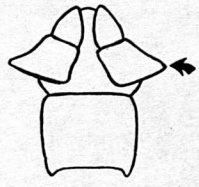
IXODES RICINIS

Second segment of palpi not laterally produced.

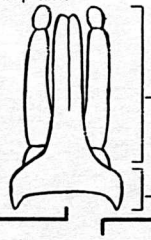


HAEMAPHYSALIS BISPINOSA

Second segment of palpi laterally produced.



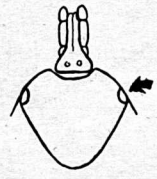
Mouthparts much longer than basis capituli.



Mouthparts as long as basis capituli.

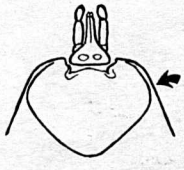
U.S. DEPARTMENT
OF HEALTH EDUCATION AND WELFARE
PUBLIC HEALTH SERVICE, CDC
ATLANTA, GA., 1966

Scutum with eyes



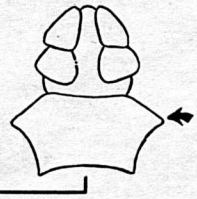
AMBLYOMMA TESTUDINARIUM

Scutum without eyes

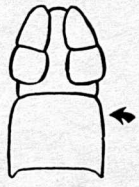


APONOMMA CRASSIPES

Basis capituli laterally produced.

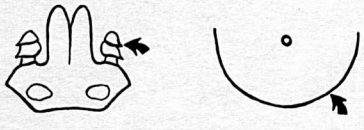


Basis capituli not laterally produced. Festoons eleven



Palpi ridged dorsally and laterally.

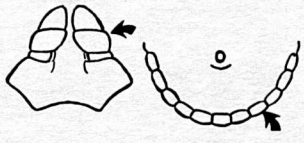
Festoons absent.



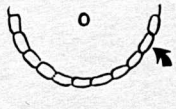
BOOPHILUS ANNULATUS

Palpi not ridged.

Festoons present.

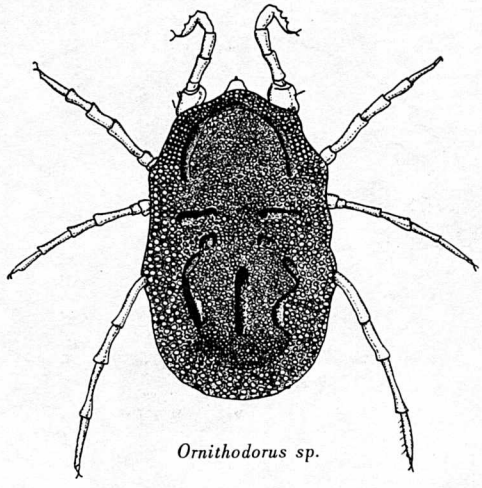


RHIPICEPHALUS SANGUINEUS

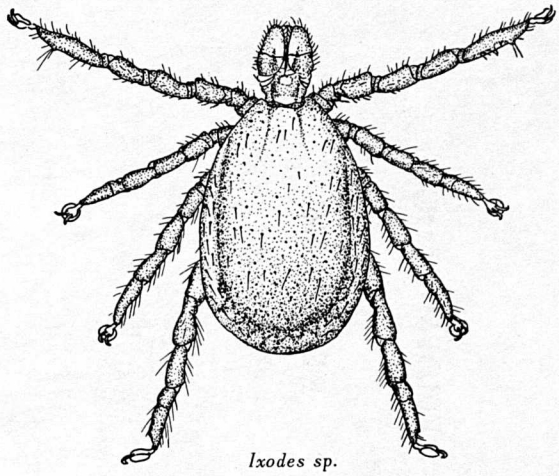


***DERMACENTOR* SPP.**

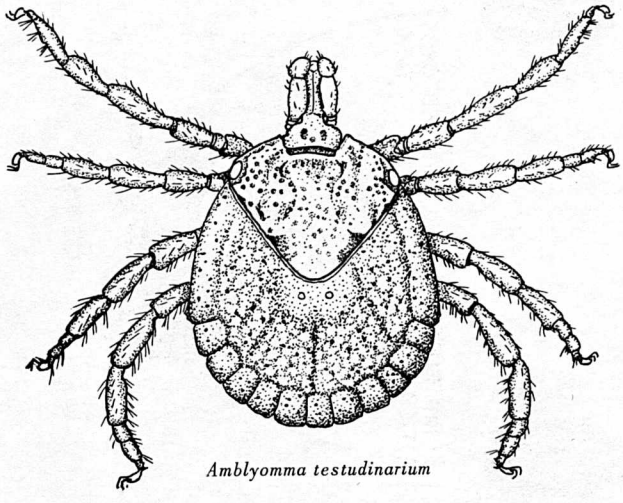
VIETNAMESE TICKS



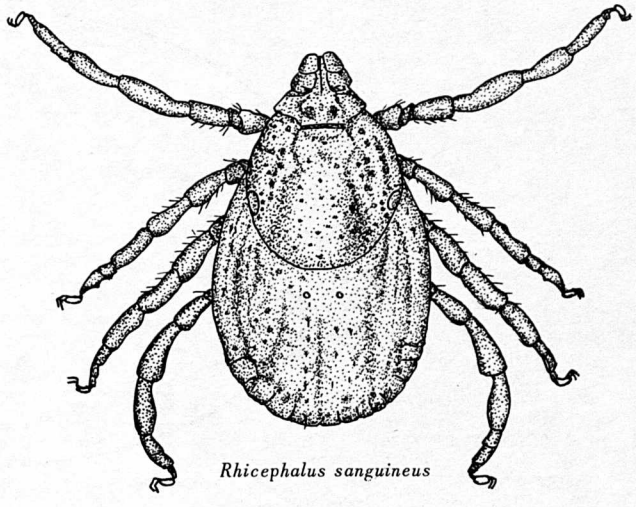
Ornithodorus sp.



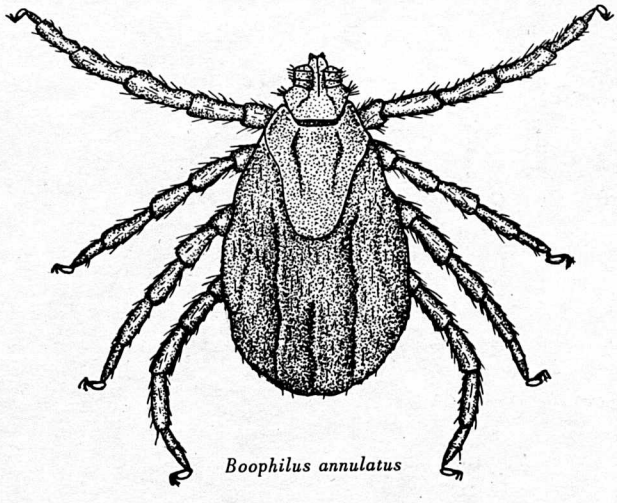
Ixodes sp.



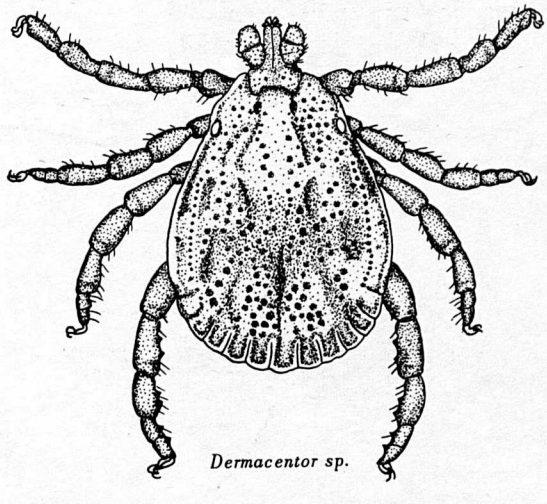
Amblyomma testudinarium



Rhicephalus sanguineus



Boophilus annulatus



Dermacentor sp.

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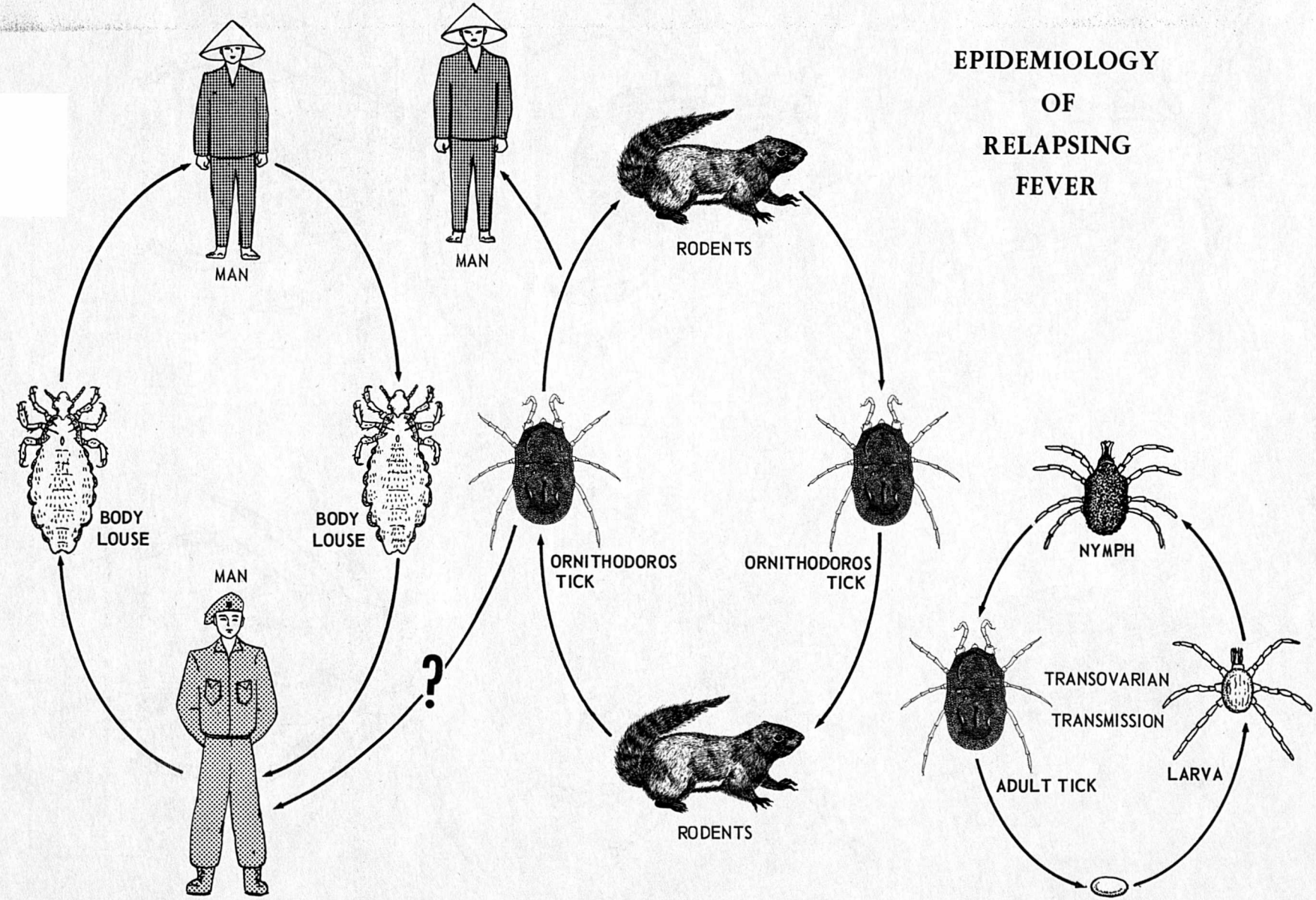
EPIDEMIOLOGY OF RELAPSING FEVER



Prepared by Harold George Scott, Ph.D. and Margery Borom – 1966

LICE COMMONLY FOUND ON MAN

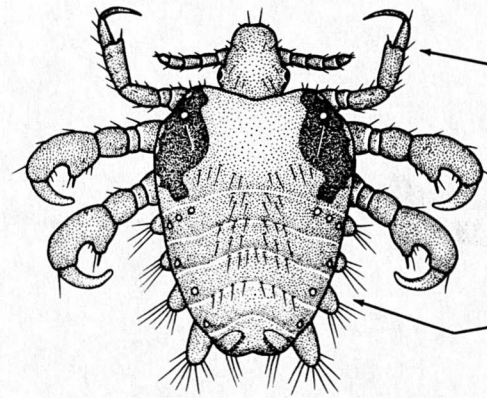
BODY LOUSE AND HEAD LOUSE

All legs of about the same length

Abdomen elongate without hairy processes laterally

PEDICULUS HUMANUS

CRAB LOUSE



First pair of legs smaller than second and third pairs of legs

Abdomen shorter with hairy processes laterally

PHTHIRUS PUBIS

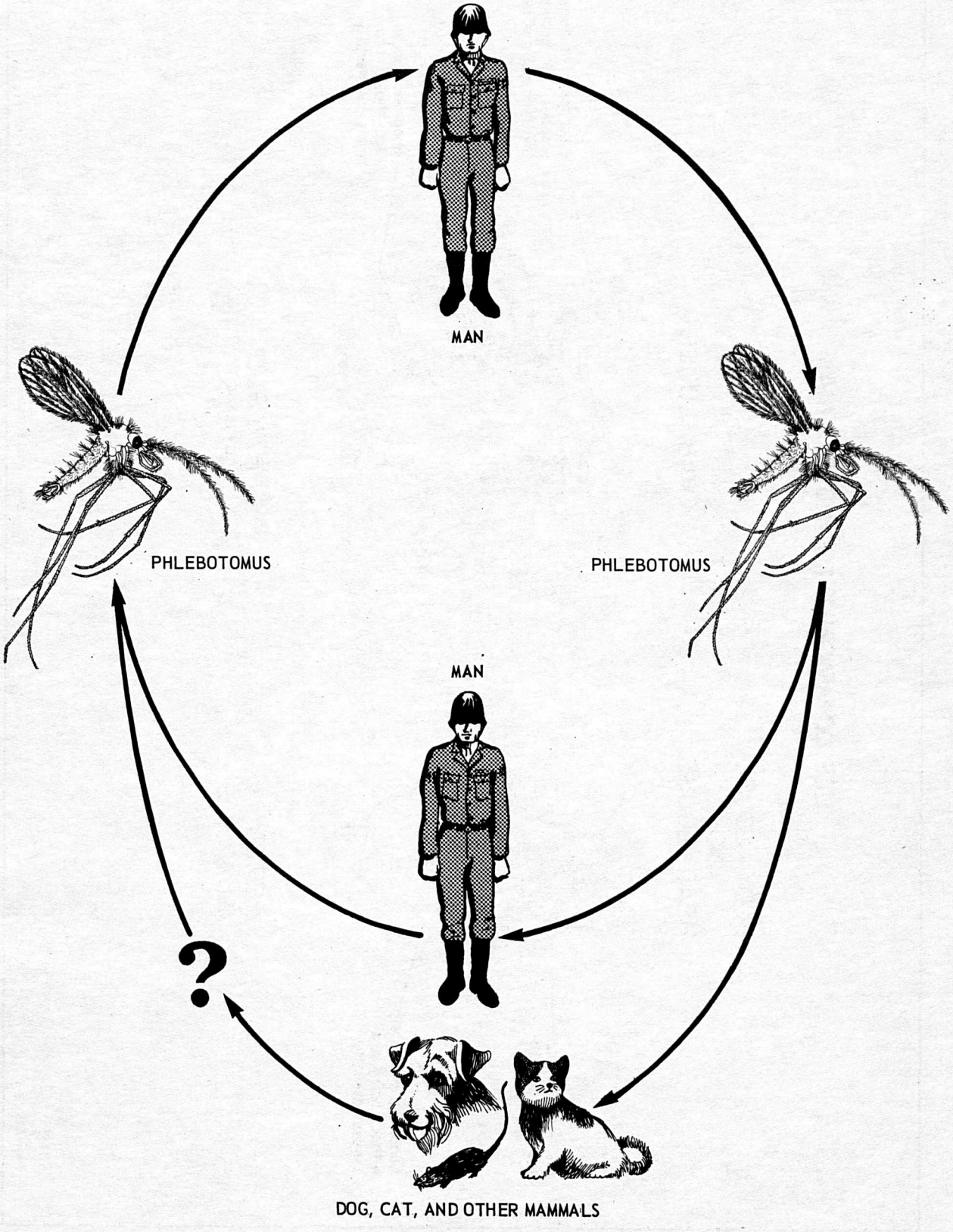
Prepared by Harry D. Pratt, Ph.D.

DHEW-PHS

COMMUNICABLE DISEASE CENTER - ATLANTA, GA.

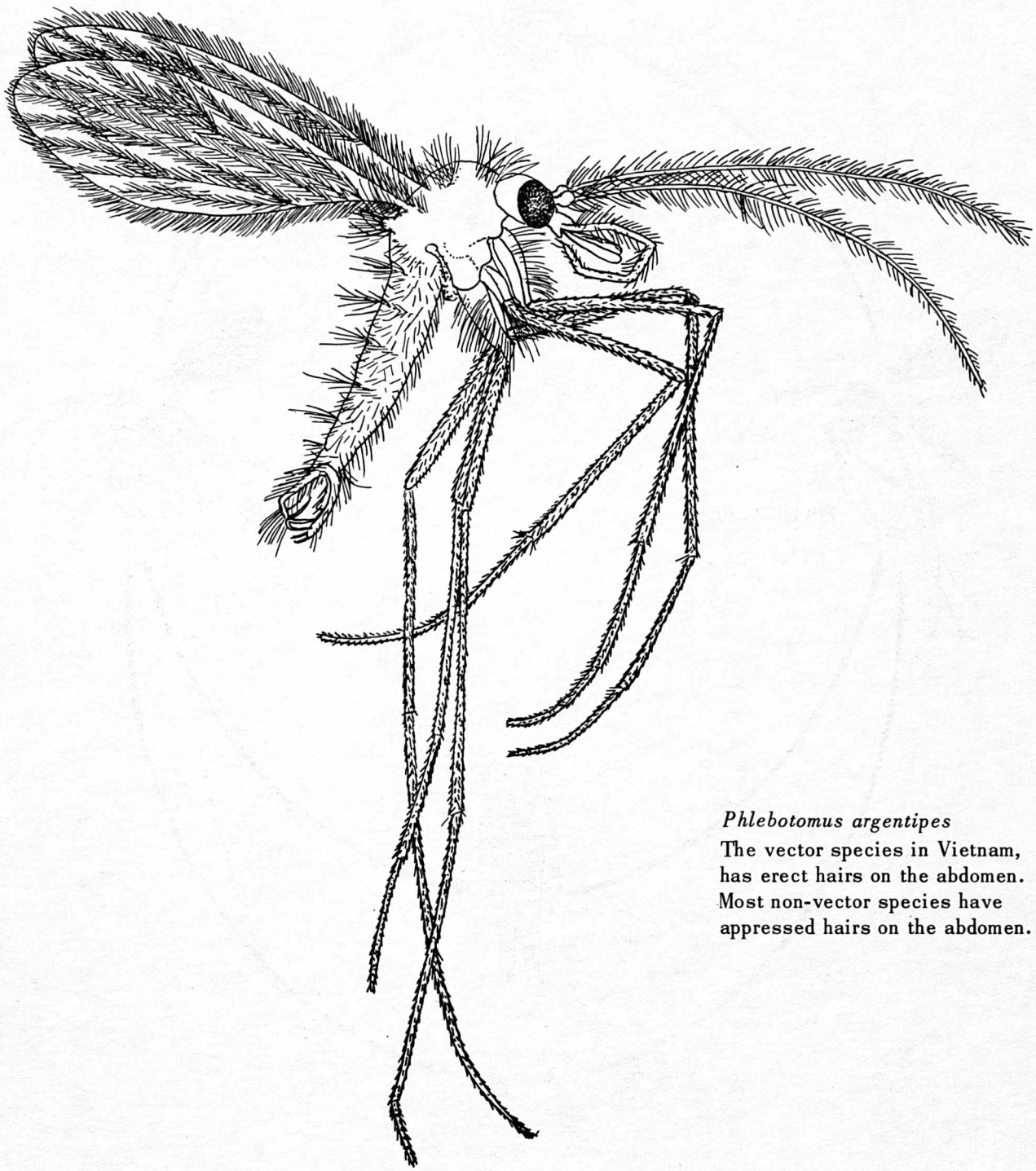
REV. AUG. 1953
OCT. 1948

EPIDEMIOLOGY OF LEISHMANIASIS



red by Harold George Scott, Ph.D. and Hector Bourg, B.F.A. – 1966

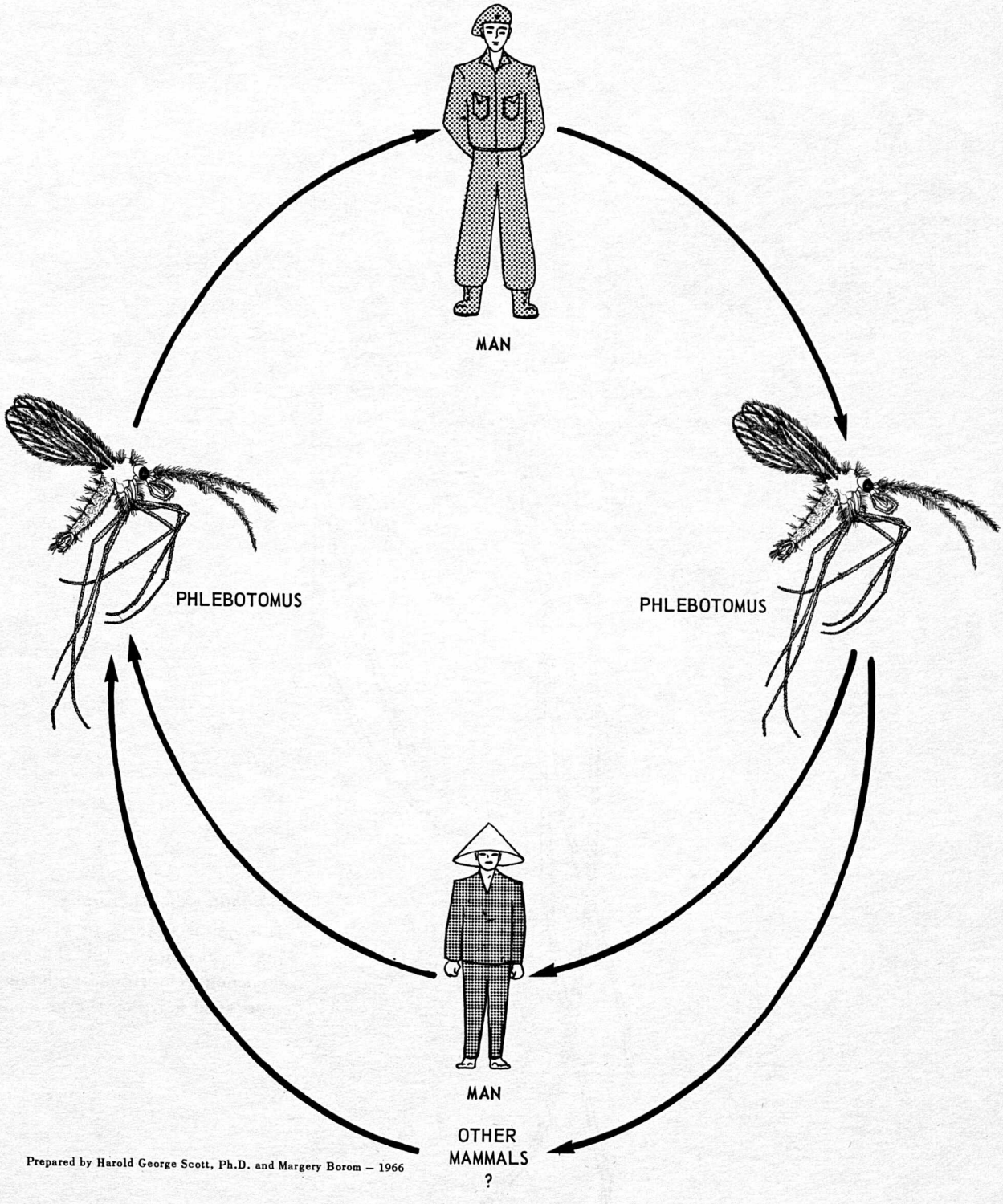
MORPHOLOGY OF PHLEBOTOMUS



Phlebotomus argentipes
The vector species in Vietnam, has erect hairs on the abdomen. Most non-vector species have appressed hairs on the abdomen.

Prepared by Harold George Scott, Ph.D. and Margery Borom – 1966

EPIDEMIOLOGY OF SAND-FLY FEVER



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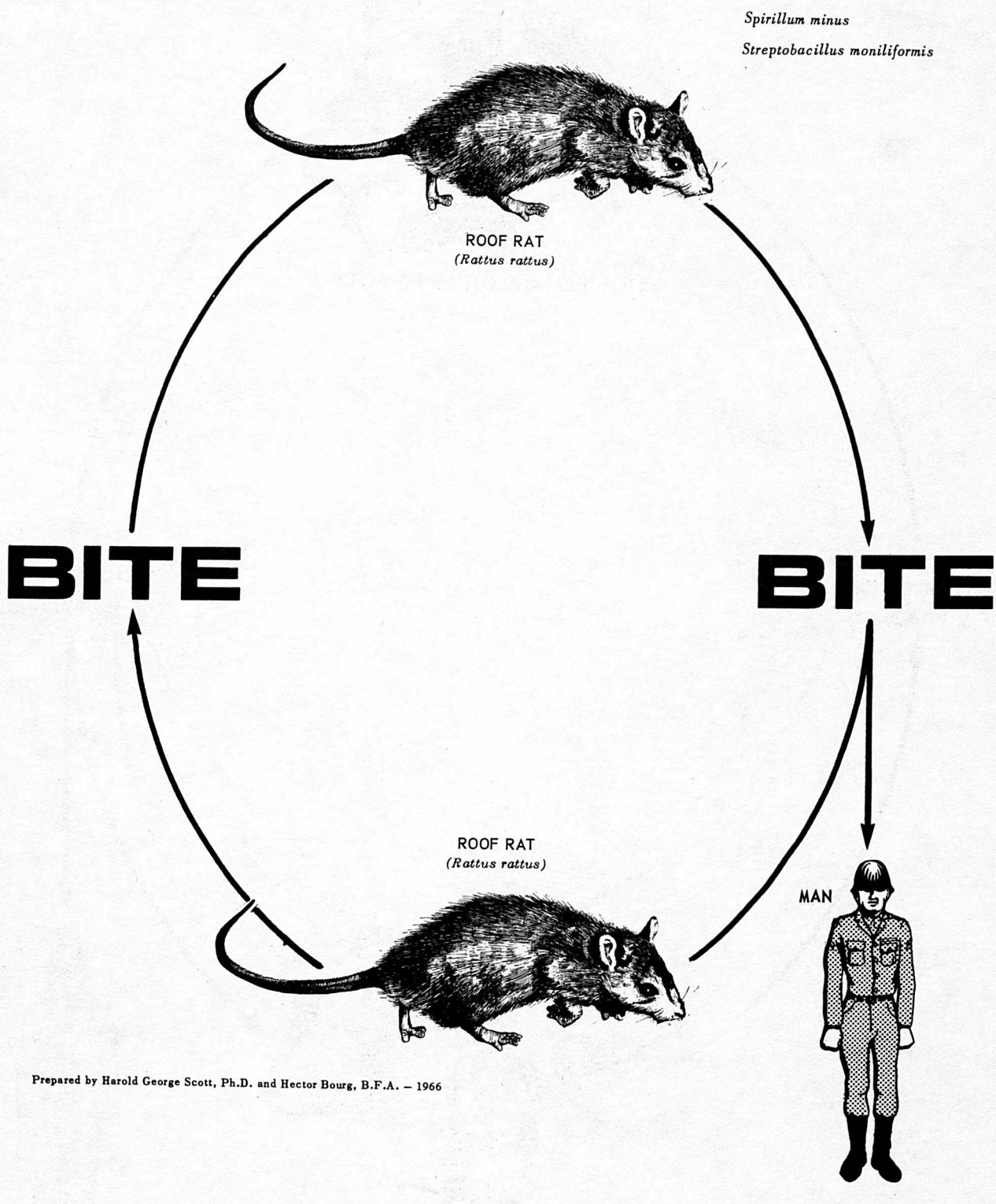
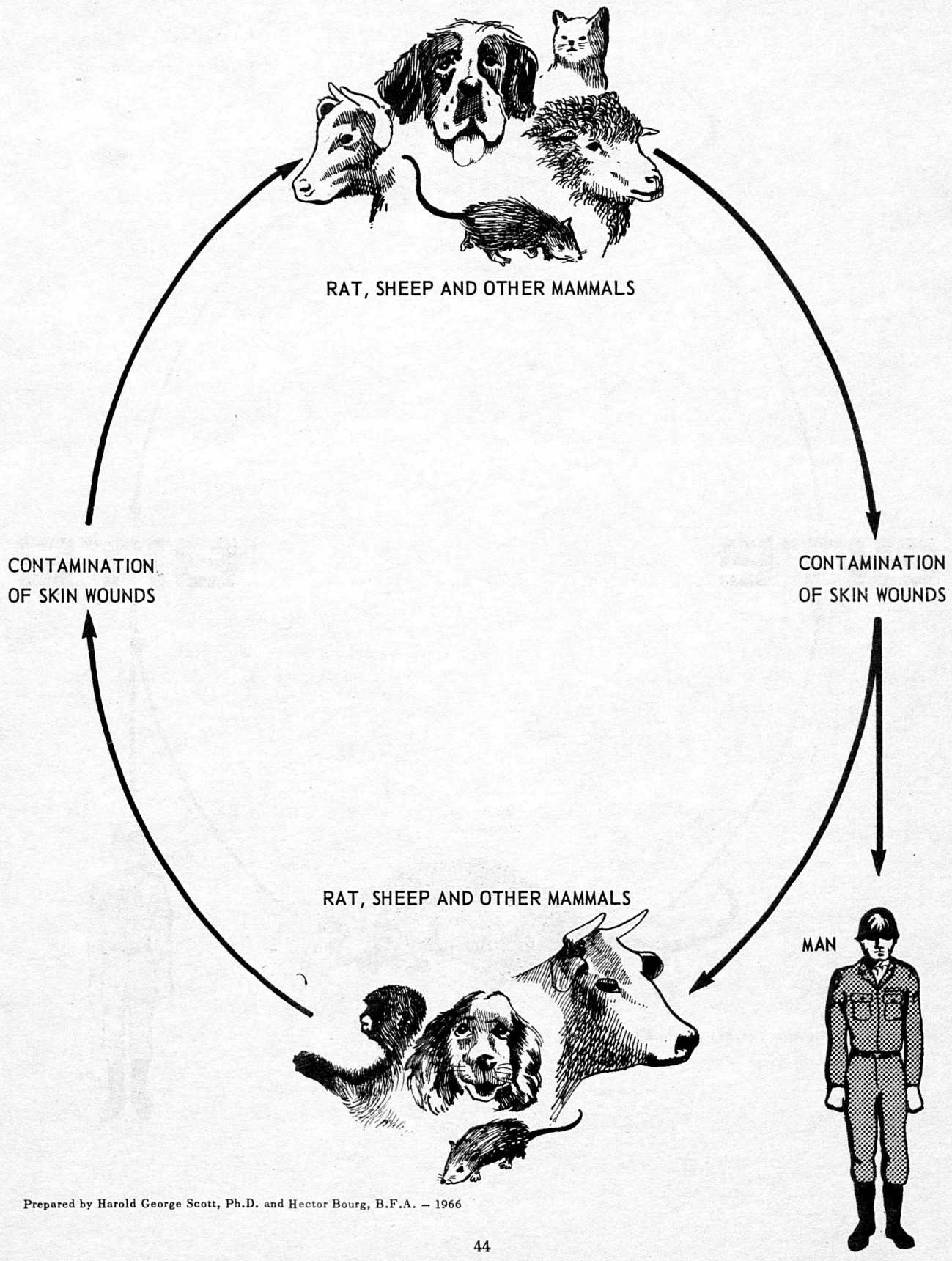
EPIDEMIOLOGY OF RAT-BITE FEVERS



Prepared by Harold George Scott, Ph.D. and Hector Bourg, B.F.A. – 1966

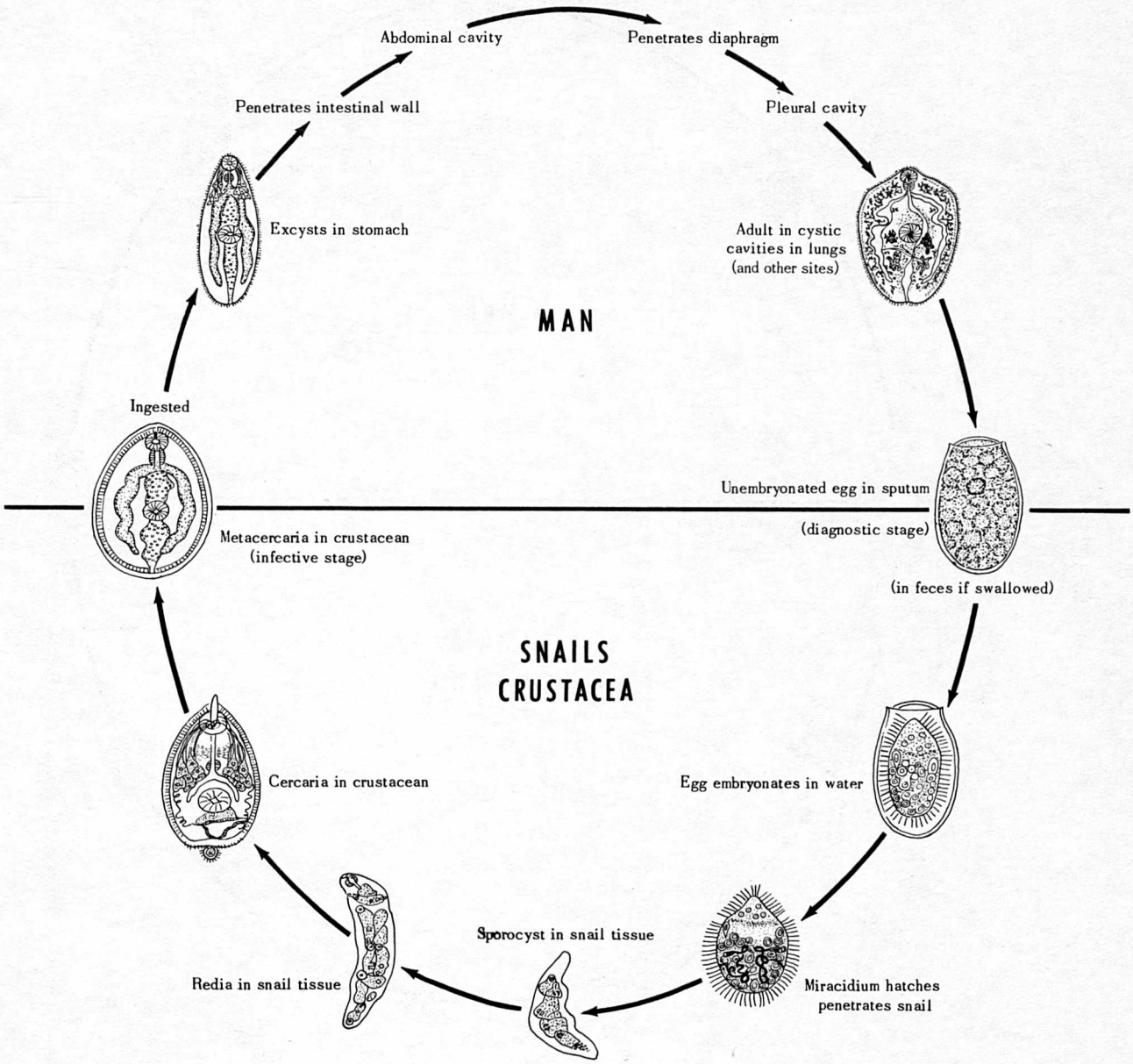
EPIDEMIOLOGY OF MELIOIDOSIS



Prepared by Harold George Scott, Ph.D. and Hector Bourg, B.F.A. – 1966

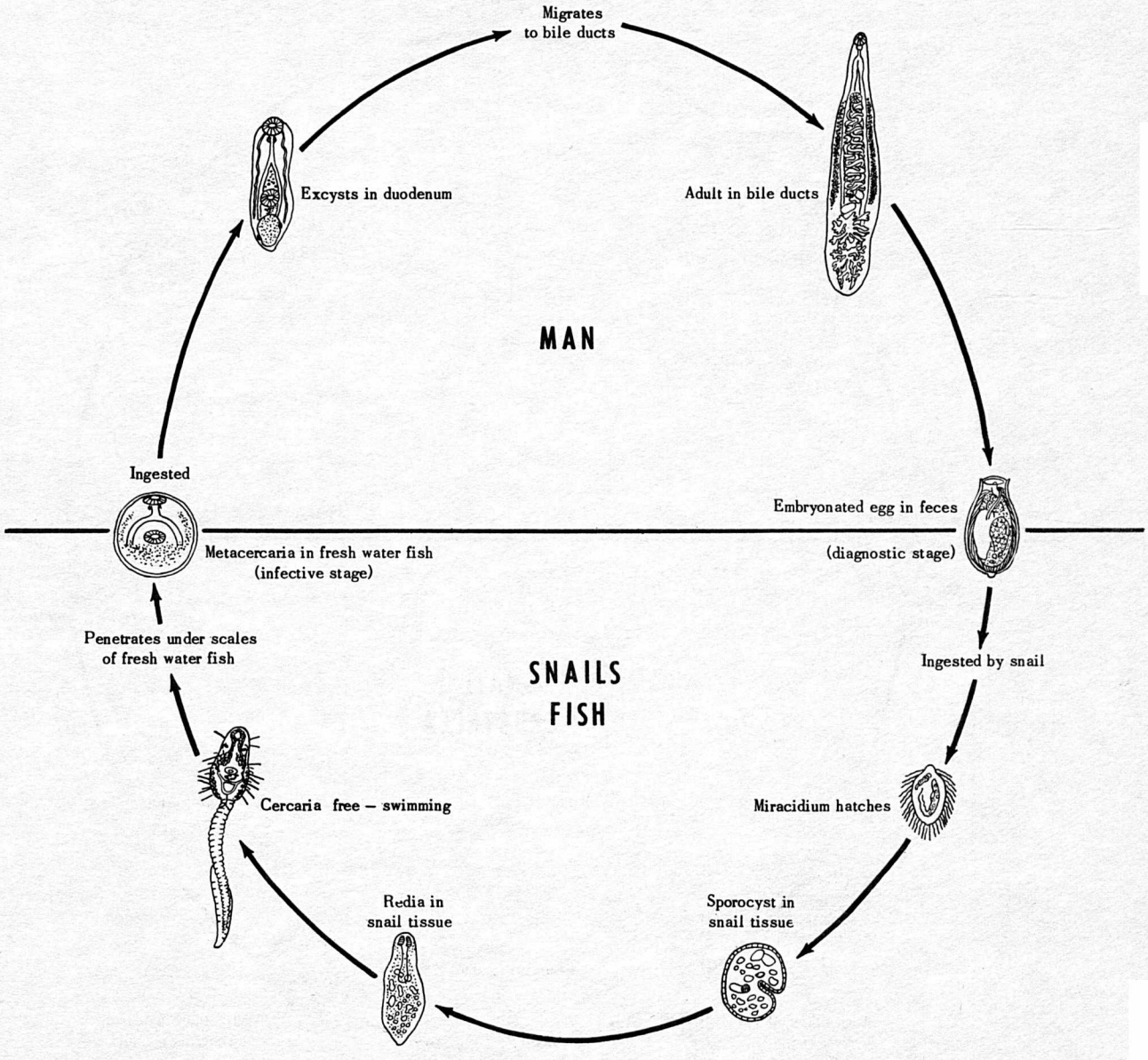
LIFE CYCLE of

Paragonimus westermani



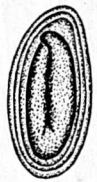
LIFE CYCLE of

Clonorchis sinensis

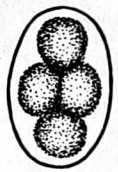


Common Diagnostic Stages of Intestinal Helminths of Man

NEMATODES

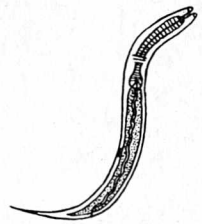


Enterobius vermicularis egg



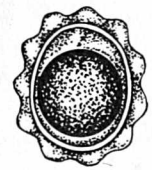
Hookworm egg 4-cell

Hookworm egg Multi-celled

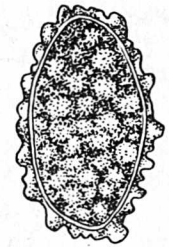


Hookworm rhabditiform larva

Strongyloides stercoralis rhabditiform larva



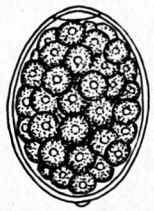
Ascaris lumbricoides egg • • • 1-cell



Ascaris lumbricoides egg • • • unfertile

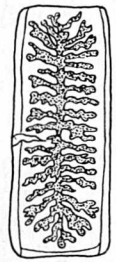
Trichuris trichiura egg

CESTODES

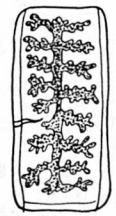


Diphyllobothrium latum egg

Taenia egg



Taenia saginata proglottid

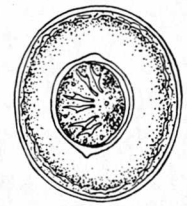


Taenia solium proglottid

Dipyllidium caninum proglottid

Dipyllidium caninum egg packet

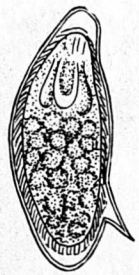
Hymenolepis nana egg



Hymenolepis diminuta egg

TREMATODES

Schistosoma japonicum egg

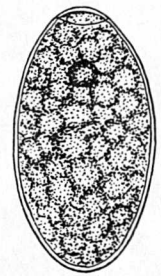


Schistosoma mansoni egg

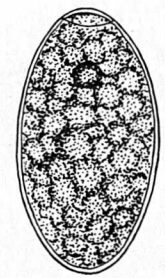
Schistosoma haematobium egg

Clonorchis sinensis egg

Paragonimus westermani egg



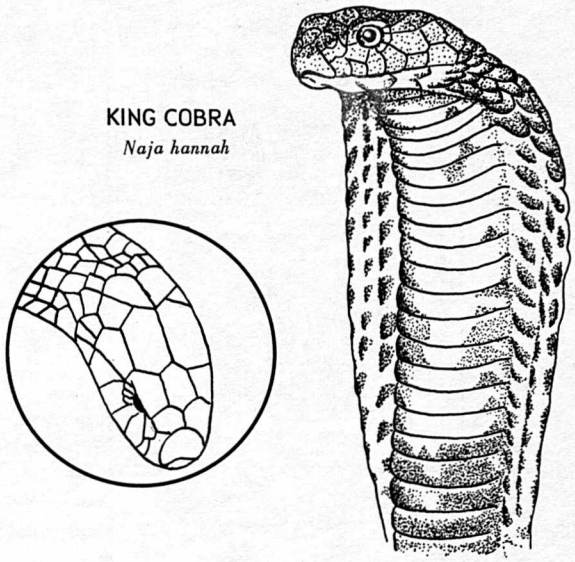
Fasciolopsis buski egg



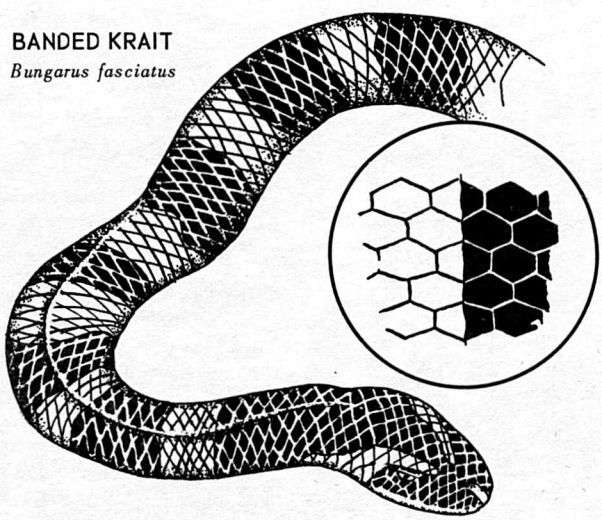
Fasciola hepatica egg

DRAFT - TO BE REVISED

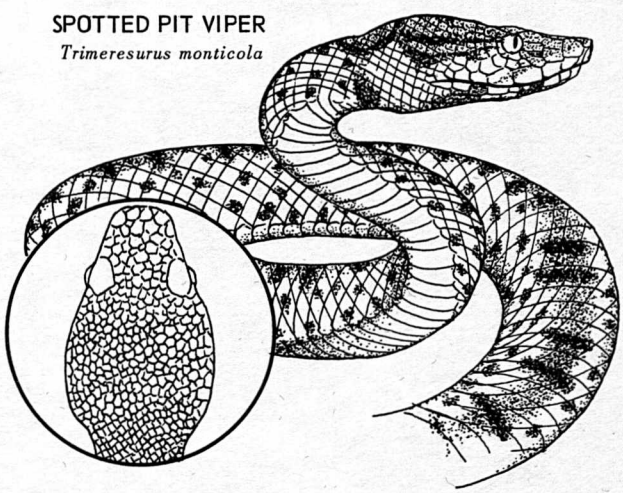
VENOMOUS SNAKES OF VIETNAM



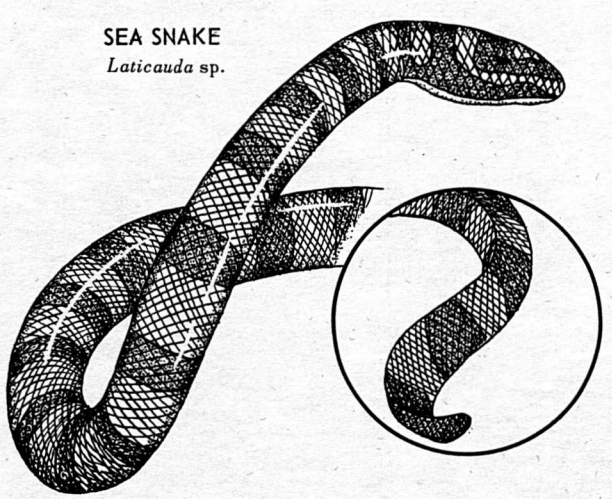
KING COBRA
Naja hannah



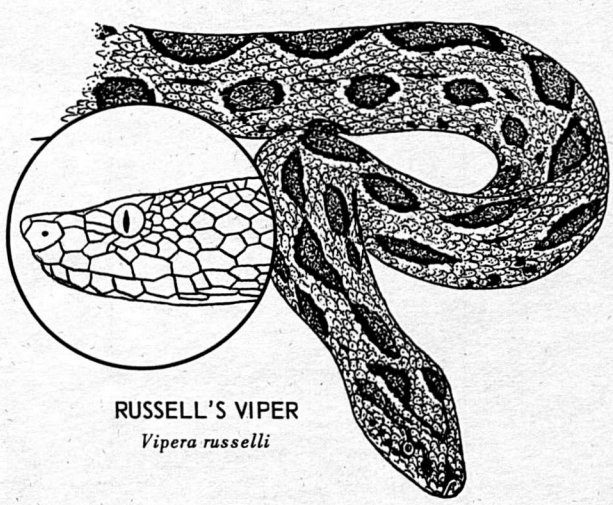
BANDED KRAIT
Bungarus fasciatus



SPOTTED PIT VIPER
Trimeresurus monticola



SEA SNAKE
Laticauda sp.



RUSSELL'S VIPER
Vipera russelli

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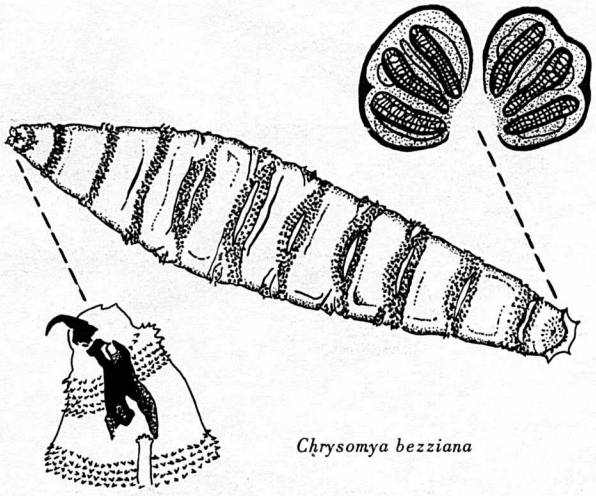
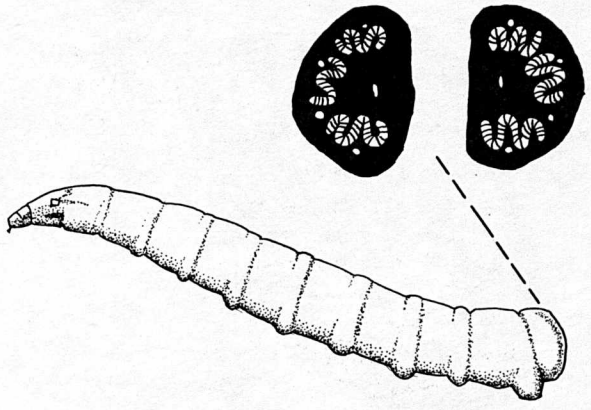
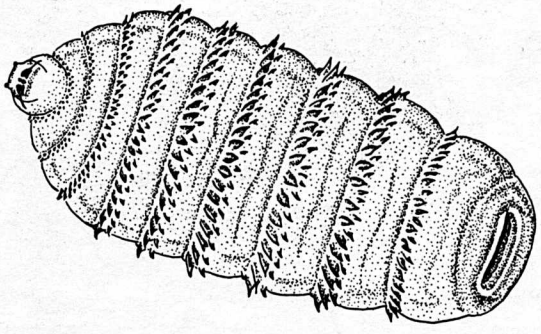
MYIASIS-PRODUCING FLY LARVAE IN VIETNAM



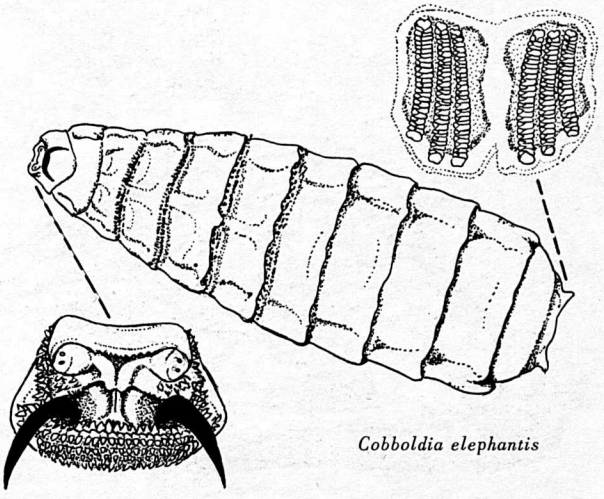
Chrysomya bezziana



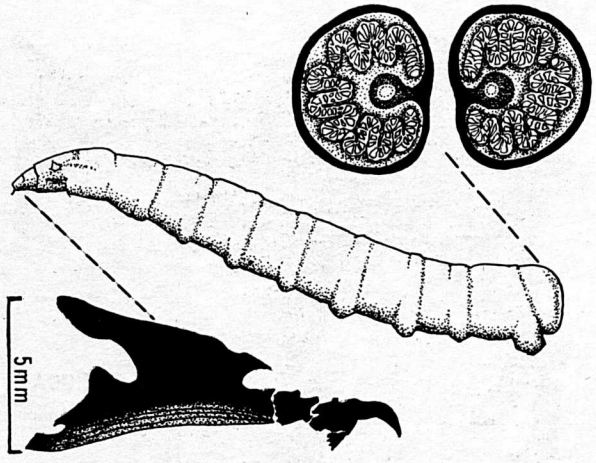
Stomoxys calcitrans



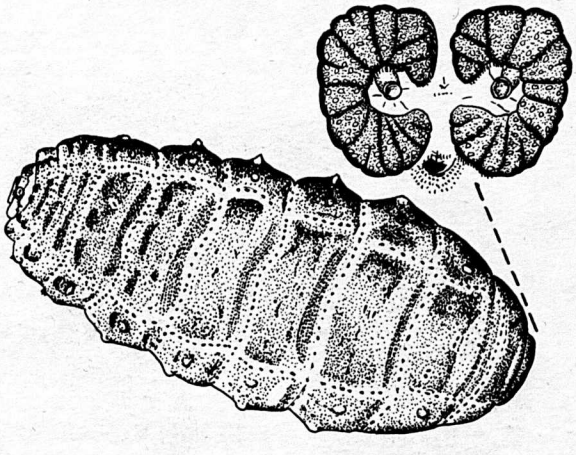
Gasterophilus intestinalis



Cobboldia elephantis



Musca domestica vicina



Hypoderma lineatum

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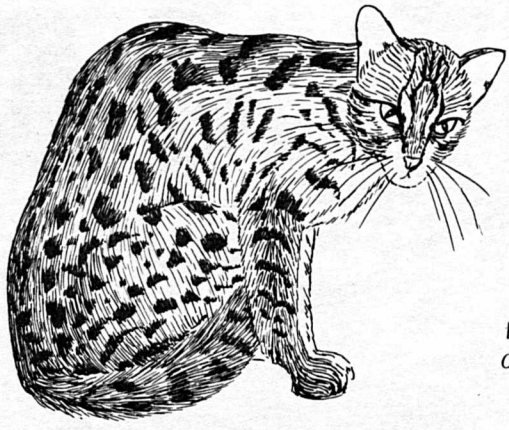
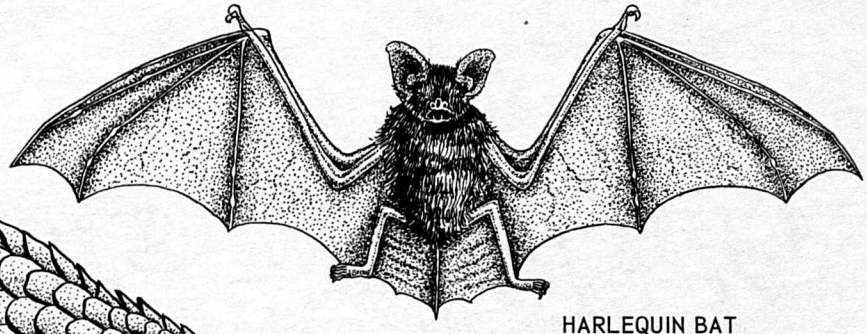
MAMMALS OF VIETNAM

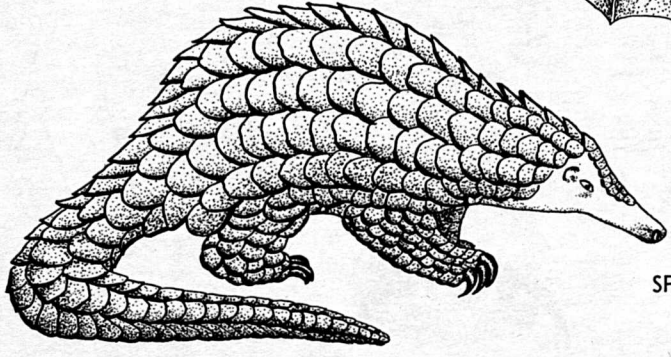


LEOPARD CAT
Felis bengalensis

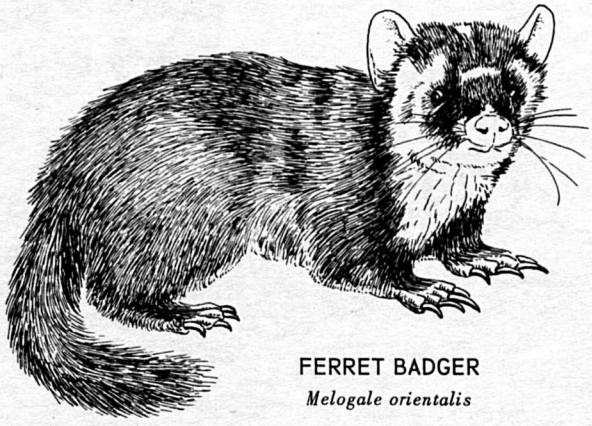
MALAYAN SQUIRREL
Callosciurus nigrovittatus



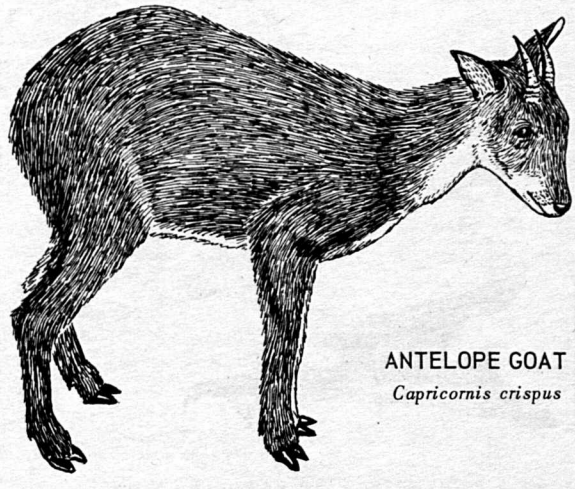
HARLEQUIN BAT
Scotomanes beaulieui



SPINY ANTEATER
Manis javanica



FERRET BADGER
Melogale orientalis



ANTELOPE GOAT
Capricornis crispus

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