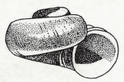
KEY TO THE MAJOR INVERTEBRATE SPECIES OF STREAM ZONES IN NORTHEAST COLORADO

MACRO ORGANISM

WITH SHELLS
HARD, LIKE A SEASHELL OR SNAIL SHELL

SINGLE SHELL
(CLASS GASTROPODA)

SUBCLASS PROSOBRANCHIA



GILLED SNAIL
RIGHT OPENING
FA:VALVATIDAE
G:VALVATA SP.

SUBCLASS PULMONATA

SPIRAL SHELL

POUCH SNAIL
LEFT OPENING
FA:PHYSIDAE
COMMON

COILED SHELL

ORB SNAIL
FA:PLANORBIDAE
G:HELISOMA

CONICAL SHELL

LIMPET
FA:ANCYLIDAE
G:FERRISSIA

DOUBLE SHELL
(CLASS BIVALVIA)

ABOUT 1/2 INCH

PILL CLAM
FA:SPHAERIIDAE
G:PISIDIUM

2-4 INCHES

FRESHWATER MUSSEL
FA:UNIONIDAE
SUB FA:LAMPELLINAE

WITHOUT SHELLS

SEGMENTED BODY

OBVIOUS JOINTED LEGS
(PHYLUM ARTHROPODA)

4 PAIRS OF LEGS
(8 LEGS)

VERY, VERY SMALL
0.1 INCH

WATERMITE
OR:ACARINA
HYDRACHNIDA
MANY FAMILIES
COMMON

LARGE 0.4 TO
0.7 INCHES

FISHER SPIDER
OR:ARANEAE
FA:PISAURIDAE
UNCOMMON

MORE THAN 4 PAIRS OF LEGS
(MORE THAN 8 LEGS -
MAY BE DIFFICULT TO SEE)

LOBSTER-LIKE;
UP TO 5 INCHES

CRAYFISH
OR:DECAPODA
G:ORCONECTES

CYLINDRICAL BODY

COPEPOD
SUB CL:
COPEPODA

CLAM-LIKE "SHELL"

OSTRACOD
CL:OSTRACODA

BODY FLATTENED
TOP TO BOTTOM

ISOPOD
OR:ISOPODA
FA:ASELLIDAE

BODY FLATTENED
SIDE TO SIDE

SWIMS WITH
Y-SHAPED ANTENNAE

CLADOCERAN
(WATER FLEA)
CL:BRANCHIPODA
FA:DAPHNIIDAE

SWIMS
WITH LEGS

AMPHIPOD
OR:AMPHIPODA
FA:GAMMARIDAE
HYALELLA
AND GAMMARUS

3 PAIRS OF LEGS
(6 LEGS) (CLASS INSECTA)

WORM-LIKE LARVA
ABOUT 1 INCH;
SMALLER AT HIGHER
ELEVATIONS

CRANE FLY LARVA
FA:TIPULIDAE

POSTERIOR
BREATHING TUBE

MOSQUITO LARVA
OR:DIPTERA
FA:CULICIDAE
UNCOMMON

SOME HAVE
BRIGHT
RED BODY

MIDGE LARVA
(BLOODWORMS)
OR:DIPTERA
FA:CHIRONOMIDAE

ROUND;SWOLLEN
ABDOMEN;CIRCLE
OF HOOKS ON BOTTOM
OF ABDOMEN

BLACK FLY LARVA
FA:SIMULIIDAE

TRANSPARENT BODY;
SILVERY AIR SACS

MIDGE LARVA
(GLASSWORM)
FA:CHAOBORIDAE
SUB FA:CHAOBORINAE

NO OBVIOUS JOINTED LEGS

SOME APPENDAGES
(CLASS INSECTA)

UNSEGMENTED BODY

ASYMMETRICAL

ROUGH-TEXTURE;
PORES

FRESHWATER SPONGE
OR:PORIFERA
FA:SPONGILLIDAE
UNCOMMON

SMOOTH;
NO PORES

BRYOZOAN COLONY
PH:BRYOZOA
UNCOMMON

RADIAL SYMMETRY

SESSILE

HYDRA
OR:HYDROIDA

FREE SWIMMING

FRESHWATER JELLYFISH
CNIDARIA
CL:HYDROZOA
UNCOMMON

BILATERAL SYMMETRY

ROUNDED BODY

THREADWORM
PH:NEMATODA
CL:ADENOPHOREA,
SECERNENTEA

FLATTENED BODY;
TRIANGULAR HEAD

PLANARIAN
(FLATWORM)
OR:TRICLADIA
CL:TURBELLARIA
FA:PLANARIDAE
G:DUGESIA

NO OBVIOUS APPENDAGES

CL:HIRUDINEA
(LEECHES)

SMOOTH BODY:
SUCKERS

LEECH

CL:OLIGOCHETA
(AQUATIC WORMS)

TUBE-DWELLING

TUBIFEX
(BLOODWORM)

BODY WITH
BRISTLES;
NO SUCKERS

BRISTLE WORMS
FA:NAIDIDAE

NO WINGS

FREE-LIVING

2 TAIL APPENDAGES

2 LONG, THIN TAIL
APPENDAGES -
GILLS ON ABDOMEN

MAYFLY NYMPH
OR:EPHEMEROPTERA

SHORT ANTENNAE;
ONE CLAW AT END
OF EACH LEG

BEETLE LARVA
OR:COLEOPTERA
FA:DYTISCIDAE

LONG ANTENNAE;
TWO CLAWS AT END
OF EACH LEG

STONEFLY NYMPH
OR:PLECOPTERA
9 FAMILIES

3 TAIL APPENDAGES

3 LONG, THIN TAIL
APPENDAGES -
GILLS ON ABDOMEN

MAYFLY NYMPH
OR:EPHEMEROPTERA

ODONATA

PLATE-LIKE TAIL
APPENDAGES

DAMSELFLY NYMPH
SUB OR:ZYGOPTERA

SHORT,
INCONSPICUOUS
TAIL APPENDAGES

DRAGONFLY NYMPH
SUB OR:ANISOPTERA

NO HOOKS
OR TAILS
5 PAIRS OF FALSE
LEGS ON ABDOMEN

AQUATIC MOTH
CATERPILLAR
OR:LEPIDOPTERA
FA:PYRALIDAE

TWO HOOKS ON
LAST SEGMENT

CADDISFLY LARVA
OR:TRICHOPTERA

LIVE IN TUBE
OR CASE

CASE MADE OF
SILK, SAND OR
LEAF FRAGMENTS

CADDISFLY LARVA
OR:TRICHOPTERA

2 PAIRS OF WINGS

FRONT PAIR OF WINGS
W/ HORNS;CHEWING MOUTHPARTS
(ORDER COLEOPTERA)

LARGE;POWERFUL
DIVER AND SWIMMER;
HARD SHELL-LIKE
FOREWINGS

DYTISCID BEETLE
(DIVING BEETLE)

FOUND IN
SHALLOW RIFFLE
AREAS

RIFFLE BEETLE
FA:ELMIDAE

SMALL;VERY ACTIVE
AT SURFACE;
SWIMS IN CIRCLES

WHIRLIGIG BEETLE
OR:COLEOPTERA
FA:GYRINIDAE
UNCOMMON

ONLY HALF OF FRONT WINGS
W/ HORNS;SUCKING MOUTHPARTS
(ORDER HEMIPTERA)

FOUND ON
SURFACE FILM

WATER STRIDER
OR:HEMIPTERA
FA:GERRIDAE

FOUND
UNDERWATER

POSTERIOR
BREATHING TUBE

WATER SCORPION
OR:HEMIPTERA
FA:NEPIDAE
UNCOMMON

NO BREATHING
TUBE

UP TO 3 INCHES

GIANT WATER BUG
FA:BELOSTOMATIDAE

LESS THAN 1/2 INCH

SWIMS ON BACK;
BACK LEGS LONG
AND OAR-LIKE

BACKSWIMMER
OR:HEMIPTERA
FA:NOTONECTIDAE
UNCOMMON

SWIMS ON ABDOMEN;
FRONT LEGS SHORT
WITH "SCOOPS"

CORIXID WATER
BOATMAN
OR:HEMIPTERA
FA:CORIXIDAE

City of Fort Collins Utilities

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