

RESEARCH VESSEL _____ DATE _____ ; NAME _____
 LOCATION (START): LAT _____ ; LONG _____ . BOTTOM DEPTH _____ ;
 LOCATION (END): LAT _____ ; LONG _____ ;
 TIME: IN _____ AT DEPTH _____ START UP _____ SURFACE _____ ; DEPTH OF SAMPLE: _____ ;
 DURATION OF TRAWL _____ ; NET & SIZE: _____ ; MISC. _____

INVERTEBRATES

PHYLUM RADIOLARIA

“Round yellow ones” _____

PHYLUM CTENOPHORA

- Class Nuda
 - Order Beroida
 - Family Beroidae
 - Beroe abyssicola* _____
 - Beroe forskali* _____
 - Beroe cucumis* _____
 - Class Tentaculata
 - Order Cestida
 - Family Cestidae
 - Cestum veneris* _____
 - Velamen parallelum* _____
 - Order Cydippida
 - Family Euplokamidae
 - Euplokamis dunlapae* _____
 - Euplokamis californiensis?* _____
 - Family Pleurobranchiidae
 - Hormiphora californiensis* _____
 - Pleurobrachia pileus (brachei?)* _____
 - Order Lobata

PHYLUM CNIDARIA (COELENTERATA)

- Class Hydrozoa
 - Order Calycophora (siph /w swimming bells only)
 - Family Diphyidae
 - Chuniphyes multidentata* _____
 - Lensia hostile* _____
 - Lensia havoc* _____
 - Family Hippopodiidae
 - Vogtia* sp. _____
 - Family Prayidae
 - Praya dubia* _____
 - Family Sphaeronectidae
 - Sphaeronectes* sp. _____
 - Order Cystonecta (siph /w float only)
 - Order Physonecta (siph /w float & swimming bells)
 - Family Agalmidae
 - Bargmannia elongate* _____
 - Nanomia bijuga* _____
 - Agalma* sp. _____
 - Family Forskaliidae
 - Forskalia* sp. _____
- Class Hydrozoa, subclass Hydromedusae
 - Order Anthomedusae
 - Family Pandeidae
 - Leuckartiara* sp. _____
 - Family Pandeidae
 - Polyorchis* sp. _____
 - Order Leptomedusae
 - Family Aequoreidae
 - Aequorea* sp. _____
 - Family Campanulariidae
 - Phialidium* sp. _____
 - Family Dipleurosomatidae
 - Dipleurosoma pacificum* _____

- Family Eirenidae
 - Eutonina indicans* _____
- Family Laodiceidae
 - Ptychogena lacteal* _____
- Family Mitrocomidae
 - Tiaropsidium kelseyi* _____
 - Mitrocoma cellularia* _____
 - Foersteria purpurea* _____
- Family Tiarannidae
 - Modeeria rotunda* _____
- Order Narcomedusae
 - Family Aeginidae
 - Aegina citrea* _____
 - Aeginura grimaldii* _____
 - Family Cuninidae
 - Solmissus incisa* _____
- Order Trachymedusae
 - Family Geryoniidae
 - Liriope tetraphylla* _____
 - Family Halicreatidae
 - Halitrephes* sp. _____
 - Halicreas* sp. _____
 - Haliscera bigelowi* _____
 - Haliscera conica* _____
 - Family Ptychogastridae
 - Ptychogastria* _____
 - Family Rhopalonematidae
 - Colobonema sericeum* _____
 - Crossota rufobrunnea* _____
 - Pantachogon* sp. _____
- Class Scyphozoa
 - Order Coronatae
 - Family Atollidae
 - Atolla vanhoeffeni* _____
 - Atolla wyvillei* _____
 - Family Periphyllidae
 - Periphylla periphylla* _____
 - Family Tetraplataidae
 - Tetraplata volitans* _____
 - Order Semaestomeae
 - Family Pelagiidae
 - Chrysaora fuscenscens* _____
 - Chrysaora colorata* _____
 - Pelagia colorata* _____
 - Family Pelagiidae
 - Aurelia aurita* _____
 - Aurelia labiata* _____
 - Poralia rufescens* _____
- Unidentified _____

PHYLUM NEMERTEA

- Class Enopla
 - Order Hoplonemertea
 - Family Nectonemertidae
 - Nectonemertes mirabilis* _____
 - Phallonemertes* sp. _____
 - Other _____

PHYLUM ANNELIDA (Polychaeta, Hirudinea, Oligochaeta)

- Class Aciculata
 - Order Phyllodocida
 - Family Alciopidae
 - Alcyopina* sp. _____
 - Náyades* sp. _____
 - Rhychonereella* sp. _____
 - Torrea* sp. _____
 - Vanadis* sp. _____
 - Family Lopadorrhynchidae
 - Lopadorrhynchus* sp. _____
 - Pelagobia* sp. _____
 - Family Phyllodocidae _____
 - Family Tomopteridae
 - Tomopteris* spp. _____
 - Family Typhloscolecidae
 - Sagitella kowaleskii* _____
 - Typhloscolex* sp. _____
 - Travistopsis lobifera* _____
 - Class Canalipalpata
 - Order Terebellida
 - Family Cirratuliformia
 - Poeobius meseres* _____
 - Flota vitjasi* _____

PHYLUM ARTHROPODA subphylum Crustacea

- Class Ostracoda
 - Gigantocypris agassizii* _____
- Class Maxillopoda, subclass Copepoda
 - Order Calanoida
 - "Big red copepods" _____
 - "Little red copepods" _____
 - Gaussia princeps* _____
 - Paraeuchaeta* sp. _____
 - Family Pontellidae
 - Labidocera* sp. _____
 - Class Malacostraca
 - Order Leptostraca
 - Family Nebaliopsidae
 - Nebaliopsis typica* _____
 - Class Malacostraca, superorder Eucarida
 - Order Decapoda, suborder Dendrobranchiata
 - Family Benthescymidae
 - Gennadas propinquus* _____
 - Family Sergestidae
 - Sergestes similis* _____
 - Class Malacostraca, superorder Eucarida
 - Order Amphionidacea
 - Amphionides reynaudii* _____
 - Class Malacostraca, superorder Eucarida
 - Order Euphausiacea
 - Family Euphausiidae
 - Euphausia pacifica* _____
 - Nematoscelis difficilis* _____
 - Thysanoessa spinifera* _____
 - Order Decapoda, suborder Pleocyemata, infraorder Anomura
 - Family Galatheidae
 - Pleuroncodes planipes* _____
 - Munidopsis* spp. _____
 - Other Galatheidae _____
 - Class Malacostraca, superorder Eucarida

Order Decapoda, suborder Pleocyemata, infraorder

- Caridea
 - Family Pandalidae
 - Plesionika* sp. _____
 - Family Pandalidae
 - Pasiphaea pacifica* _____
 - Pasiphaea emarginata* _____
 - Pasiphaea chacei* _____
 - Parapasiphaea sulcatifrons* _____
 - Pasiphaea cortezianus* _____
- Class Malacostraca, Superorder Peracarida
 - Order Isopoda
 - Family Cymothoidae
 - Lironeca vulgaris* _____
 - Family Munnopsidae
 - Acanthamunnopsis milleri* _____
 - Munneurycope murrayi* _____
 - Paramunnopsis* spp. _____
 - Munnopsis* spp. _____
 - Order Mysida
 - Gnathophausia ingens* _____
 - Boreomysis* spp. _____
 - Family Eucopiidae
 - Eucopia kincaidii* _____
 - Eucopia mucronata* _____
 - Order Amphipoda
 - suborder Gammaridea
 - Orchomenella* spp. _____
 - Cyphocaris anonyx* _____
 - Lanceola* sp. _____
 - Orchomene obtusa* _____
 - Stilipes distincta* _____
 - Paracallisoma coesus* _____
 - suborder Hyperiidea
 - Cystisoma fabricia* _____
 - Hyperia galba* _____
 - Paraphronima crassipes* _____
 - Phronima sedentaria* _____
 - Primno macropa* _____
 - Scina* spp. _____
 - Streetsia pronoides* _____
 - Vibilia* spp. _____
 - Eupronoe* sp. _____
 - Hyperia* spp. _____
 - Other _____

PHYLUM CHAETOGNATHA

- Class Sagittoidea
 - Order Aphragomophora
 - Family Sagittidae
 - Caecosagitta macrocephala** _____
 - Ferosagitta robusta* _____
 - Ferosagitta ferox* _____
 - Flaccisagitta enflata* _____
 - Flaccisagitta hexaptera** _____
 - Mesosagitta minima* _____
 - Mesosagitta decipiens* _____
 - Parasagitta euneritica** _____
 - Pseudosagitta lyra** _____
 - Pseudosagitta maxima** _____
 - Sagitta bipunctata* _____
 - Serratosagitta bierii* _____
 - Solidosagitta zetesios** _____

Eukrohnia hamata _____
Eukrohnia fowleri _____
Krohnitta subtilis _____
Krohnitta pacifica _____
 Family Pterosagittidae _____
Pterosagitta draco _____

PHYLUM MOLLUSCA

Class Gastropoda
 Order Neotaenioglossa
 Superfamily Heteropoda
Carinaria cristata _____
Carinaria japonica _____
Firoloida desmaresti _____
Pterotrachea sautata _____
Atlanta sp. _____
 Class Gastropoda, subclass Opisthobranchia
 Order Cephalaspidea
 Family Gastropteridae
Gasteropteron pacificum _____
 Order Gymnosomata
 Family Clionidae
Clione limacine _____
Thliptodon sp. _____
 Order Thecosomata
 Family Cavoliniidae
Clio pyramidata _____
Cavolinia tridentata _____
Creseis virgula _____
 Family Cavoliniidae
Corolla spectabilis _____
 Family Limacinidae
Limacina helicina _____
 Class Cephalopoda
 Order Myopsida
 Family Loliginidae
Loligo opalescens _____
 Order Octopoda
 Family Octopodidae
Octopus dofleini _____
Octopus rubescens _____
Octopus juveniles _____
 Family Opisthoteuthidae
Grimpoteuthis sp. _____
Opisthoteuthis californica _____
 Family Bolitaenidae
Japetella diaphana heathi _____
 Order Oegopsida
 Family Chiroteuthidae
Chiroteuthis calyx _____
Valbyteuthis danae _____
 Family Cranchiidae
Galiteuthis phyllura _____
 Family Enoploteuthidae
Abraliopsis felis _____
 Family Gonatidae
Berryteuthis anonychus _____
Gonatus californiensis _____

Gonatus berryi _____
Gonatus onyx _____
Gonatus pyros _____
Gonatopsis borealis _____
 Family Histoteuthidae
Histoteuthis heteropsis _____
 Family Octopoteuthidae
Octopoteuthis deletron _____
 Family Ommastrephidae
Dosidicus gigas _____
 Family Onychoteuthidae
Moroteuthis robustus _____
Onychoteuthis borealijaponicus _____
 Order Sepioidea
 Family Sepiolidae
Rossia pacifica _____
 Order Vampyromorpha
 Family Vampyroteuthidae
Vampyroteuthis infernalis _____
 Larval Cephalopoda _____

PHYLUM CHORDATA Subphylum Urochordata
(Tunicata)

Class Larvacea (Appendicularia)
 Order Copelata (old)
Oikopleura spp. _____
Bathychordeus charon _____
Mesochordaeus erythrocephalus _____
Fritillaria sp. _____
 Class Thaliacea
 Order Doliolida
 Family Doliolidae
Doliolum gegenbauri _____
Doliolinetta intermedia (deep) _____
 Order Pyrosomatida _____
 Order Salpa
 Family Salpidae
Cyclosalpa affinis _____
Cyclosalpa bakeri _____
Pegia confederate _____
Pegia social _____
Salpa fusiformis _____
Salpa aspera _____
Thetys vagina _____
Salpa maxima _____
Thalia democratica _____

MIDWATER FISHES COLLECTED

PHYLUM CHORDATA

Class Myxini

Order Myxiniformes

Family Myxinidae

Eptatretus stoutii _____

Eptatretus deani _____

Class Chondrichthyes

Order Carcharhiniformes

Family Scyliorhinidae

Parmaturus xaniurus _____

Apristurus brunneus _____

Apristurus kampae _____

Class Osteichthyes

Order Anguilliformes

Family Nemichthyidae

Nemichthys sp. _____

Order Saccopharyngiformes

Family Cyematidae

Cyema atrum _____

Order Osmeriformes

Family Alepocephalidae

Talismania bifurcata _____

Alepocephalus tenebrosus _____

Family Platytroctidae

Holtbyrnia spp. _____

Sagamichthys abei _____

Order Argentiniformes

Family Argentinidae

Argentina sialis _____

Family Bathylagidae

Leuroglossus stilbius _____

Bathylagus wesethi _____

Bathylagus ochotensis _____

Bathylagus pacificus _____

Bathylagus milleri _____

Family Opisthoproctidae

Macropinna microstoma _____

Dolichopteryx longipes _____

Order Stomiiformes

Family Sternoptychidae

Danophos oculatus _____

Argyropelecus sladeni _____

Argyropelecus affinis _____

Argyropelecus lychnus _____

Argyropelecus hemigymnus _____

Sternoptyx diaphana (obscura?) _____

Family Gonostomatidae

Cyclothone signata _____

Cyclothone acclidens _____

Cyclothone pallida _____

Family Stomiidae

Aristostomias scintillans _____

Idiacanthus antrostomus _____

Bathophilus flemingi _____

Chauliodus macouni _____

Tactostoma macropus _____

Order Aulopiformes

Family Paralepididae

Lestidiops ringens _____

Order Myctophiformes

Family Myctophidae

Stenobranchius leucopsarus _____

Nannobranchium (Lampanyctus) ritteri _____

Nannobranchium (Lampanyctus) regale _____

Parvilux ingens _____

Tarletonbeania crenularis _____

Diaphus theta _____

Symbolophorus californiensis _____

Protomyctophum crockeri _____

Triphoturus mexicanus _____

Family Neoscopelidae

Scopelengys tristis _____

Order Lampridiformes

Family Trachipteridae

Trachipterus altivelis _____

Order Gadiformes

Family Merlucciidae

Merluccius productus (larvae) _____

Order Ophidiiformes

Family Bythitidae

Cataetx rubrirostris _____

Order Lophiiformes

Family Ceratiidae

Cryptopsaras couesii _____

Family Oneirodidae (see Pietsch and Kharin (2004)

Copeia 2004 (1): 122-127 for a key)

Oneirodes acanthias _____

Order Stephanoberyciformes

Family Melamphaidae

Melamphaes lubugris _____

Poromitra crassiceps _____

Unidentified _____

Order Beryciformes

Family Anoplogastridae

Anoplogaster cornuta _____

Order Cetomimiformes

Family Cetomimidae (whale fishes)

Order Scorpaeniformes

Family Liparidae

Nectoliparis pelagicus _____

Lipariscus nanus _____

Family Scorpaenidae

Sebastes spp. (juveniles) _____

Sebastolobus spp. (juveniles) _____

Order Perciformes

Family Zoarcidae

Lycodapus mandibularis _____

Lycodapus fierasfer _____

Melanostigma pammelas _____

Family Icosteidae

Icosteus aenigmaticus _____

Order Pleuronectiformes

Family Bothidae

Citharichthys stigmaeus _____

Citharichthys sordidus _____

Family Pleuronectidae

Glyptocephalus (Errex) zachirus _____

Microstomus pacificus _____

Unidentified flatfish larva _____

TOTALS:

Number of Invertebrate Taxa: _____; Number of Invertebrate Specimens: _____

Number of Fish Taxa _____; Number of Fish Specimens: _____

* = GMC revised according to notes in hand. Attempted to alphabetize order of species or taxa within larger groups and italicized genus and species names. Needs to be reviewed and revised for SIMoN 2004.
