

Sampling Gear

Algae

- ☐ SG-92 with brushes (see section 4.3.1)
- ☐ Gravel sampler with large masonry trowel (see section 4.3.1)

Invertebrates

- ☐ Slack sampler with 500- μ m mesh net (see section 5.3.1)
- ☐ Grab sampler (for example, petite Ponar or Ekman)
- ☐ D-frame kick net with 500- μ m mesh net

Fish

- ☐ Backpack (with ammeter) or towed electrofishing unit
- ☐ Electrofishing boat
- ☐ 3 x 1.2-m seine (6.4-mm mesh)
- ☐ 7.6 to 9.6 x 1.2-m seine (6.4-mm mesh)
- ☐ 30 to 61 x 1.8-m seine (6.4-mm mesh)

Water-Quality Meters

- ☐ Current velocity meter
- ☐ Dissolved oxygen meter
- ☐ Thermometer
- ☐ Conductivity meter
- ☐ pH meter
- ☐ Light meter and quantum sensor

Basic Field Supplies

- ☐ Wire mesh sieves (20-cm and 30-cm diameter, 500- μ m mesh)
- ☐ White buckets (19 L)
- ☐ Forceps, blunt and fine tipped
- ☐ Tongs
- ☐ Knives (pocket and putty), scalpels, scissors
- ☐ Spatula (without holes)
- ☐ Plastic petri dishes (47-mm diameter)
- ☐ Oxford™ Macro-Set hand pipettor (1 mL–5 mL w/tips)
- ☐ Heavy-duty aluminum foil
- ☐ Hand-held electric stirrer (periphyton homogenizer)
- ☐ Batteries (various sizes including 12 volt)
- ☐ Whatman™ GF/F glass fiber filters (25-mm and 47-mm diameter)
- ☐ Hand-operated vacuum pump with pressure gauge
- ☐ Plastic Erlenmeyer flask (1 L)
- ☐ Filter funnel and base (for 25 mm and 47 mm filters)
- ☐ Hand saw or lopping shears
- ☐ White enamel or plastic trays
- ☐ Hand brush
- ☐ Dice
- ☐ Gas can with pre-mixed fuel
- ☐ Electrofishing battery charger
- ☐ Dip nets
- ☐ Portable aeration system
- ☐ Live cage for holding fish
- ☐ Small aquarium nets
- ☐ Small wooden club
- ☐ Syringes with locking hypodermic needles
- ☐ Resealable plastic bags, various sizes
- ☐ Arm-length rubber gloves (per person)
- ☐ Surgical gloves
- ☐ Chemical splash goggles
- ☐ Respiratory mask with formaldehyde filter
- ☐ Heavy-duty nylon thread and sewing needles
- ☐ Hand rake
- ☐ Squirt bottles
- ☐ Wide-mouth Nalgene™ sample bottles (60, 125, 250, 500 mL, and 1 L)
- ☐ Plastic scintillation vials
- ☐ Alcohol/waterproof pens, black
- ☐ Pencils (lead, red wax)
- ☐ Waterproof paper
- ☐ Field data sheets printed on waterproof paper
- ☐ Measuring board

- ☐ Ruler and tape measure
- ☐ Large plastic insulated coolers
- ☐ Graduated cylinders (glass 10 mL, plastic 50–500 mL)
- ☐ Hanging scale
- ☐ Portable weighing balance
- ☐ First aid kit
- ☐ Insect repellent
- ☐ Sun screen
- ☐ Antibiotic liquid soap
- ☐ Polarized sunglasses
- ☐ Cellular phone
- ☐ Flashlight and lantern
- ☐ Safety plan (with emergency phone numbers)
- ☐ Collecting permits
- ☐ Hip boots (per person)
- ☐ Chest waders (per person)
- ☐ Wader repair kit
- ☐ Rain gear
- ☐ Personal flotation devices (per person)
- ☐ Digital camera (high-resolution)
- ☐ Geographic positioning system
- ☐ Field guides (plants, fish, insects)
- ☐ Folding table and chairs
- ☐ Braided, 1.9-cm nylon rope
- ☐ Trash can
- ☐ Glue gun
- ☐ Tool set
- ☐ Paper towels

Chemicals

- ☐ 37-percent buffered formaldehyde (buffered to pH 7)
- ☐ 10-percent buffered formalin
- ☐ 1-percent bleach solution
- ☐ Anesthetic (for example, CO₂ tablets, clove oil)
- ☐ Dry ice
- ☐ Water

Basic Shipping Supplies

- ☐ Plastic tape (for example, 3M Scotch Brand™ 471)
- ☐ Resealable plastic bags, various sizes
- ☐ Heavy-duty trash bags
- ☐ Absorbent packing material
- ☐ Bubble packing sheets
- ☐ Ice chests
- ☐ Transparent packaging tape
- ☐ Shipping paperwork