Equipment wears, malfunctions, and breaks. Experienced backcountry travelers recognize that field repairs can be miserable, inconvenient, and downright dangerous enterprises and do everything they can to eliminate, or at the very least minimize the time spent repairing gear in the field. They also carry the tools, and have the skills required to repair items of equipment that are most likely to fail, clog, break, get punctured and otherwise not perform as needed.

Prior to leaving on an extended backcountry trip:

• Conduct a thorough equipment inspection prior to leaving the comforts of home and make any necessary repairs and/or replacements. DO NOT inspect gear at the last minute. In the middle of a downpour is no time to find out that your shelter is a sieve, especially if it happens on the first night of a long trip.
• Thoroughly familiarize yourself with the operating/set up procedures for any new and/or borrowed gear. Never assume that an item of borrowed gear is in good working order – or has all of the necessary working components.
• Assemble a repair kit that includes all of the essential tools and items that you anticipate needing.

REPAIR KIT ITEMS
When building your kit (especially if you are the leader of a field group on an extended trip), consider including a mixture of the following items. Your goal is to keep your kit as light and functional as possible.

General Repair Items
• Multi-tool with knife and pliers – screwdrivers and a sewing awl can also be useful
• Duct tape – several yards wrapped around your water bottle or a pencil
• Parachute cord – for replacing broken guy cords, lashing components together, etc.
• Wire – two to three feet - thin

Shelter
• Pole sleeve – aluminum sleeve that fits over a broken section of tent pole. Secure with duct tape.
• Ripstop nylon repair patches or tape – or use duct tape until you can more suitably repair a rip or tear in fabric.

Clothing and Assorted Soft Goods
• Needle and thread (a couple of different weights – heavy duty thread can tear lighter weight fabric)
• Safety pins (small and large), extra buttons
• Velcro – to hold together an item that has suffered a blown zipper
• Zipper parts for essential gear like rain gear and a sleeping bag

Backpack
• Extra buckle(s) – especially waist belt
• Speedy stitcher or a very large needle and dental floss for repairing a pack strap blowout – consider a thimble
• Clevis pins and rings - for a frame pack

Stove
• Liquid fuel stoves – stove instructions, multipurpose stove tool, jet cleaning tool, extra jet, spare cup pump, o-rings, washers, pump oil
• Canister stoves – wire to unclog the holes if a pot of food boils over. Other than that, not much repair required.

Assorted Repair Items
• Urethane-based glue like Shoe Goo, Free-sole, or Selly's Kwik Grip for boot repairs and to cover pinholes in a self-inflating air mattress
• Extra valve for self-inflating air mattress
• Screws and mini screwdriver for eyeglass repair
• Extra bite valve for hydration bag

Food Repair
• A spice kit of course