CARE AND MAINTENANCE OF HAND TOOLS

To be safe and effective on the fireline, forest fire fighting hand tools must be kept in serviceable condition. Improperly maintained tools are a hazard to the user and anyone working nearby. Proper care and maintenance of hand tools will help prevent injuries to crew members and will assist them in building firelines faster and more efficiently.

**CUTTING EDGE:**

The working edge of axes and Pulaskis must be sharpened on a true bevel on both sides of the blade. This procedure should be accomplished without overheating the metal, which would remove the temper from the steel and weaken it causing cracks and chipping to occur. Cutting edges on council rakes, hazel hoes and shovels may be maintained by using a flat file to keep them sharp.

**RUST PROTECTION:**

After the working edge of the tool has been sharpened, the next step is to remove all rust and scale. This can best be accomplished with steel wool or a wire brush. If available, use of a wire brush wheel on a power bench grinder can speed the process. Once all rust and scale has been removed, cover all metal parts with a coating of light weight machine oil.

**HANDLES:**

Be sure to check all handles for wrap, twist, cracks, rot and smoothness. Remove gouges and slivers with a wood rasp and sandpaper. Make sure the handle is smooth, then coat the entire length with raw linseed oil. Handles must NEVER be painted where hands come in contact with them. The fit of the handle to the cutting head is most important. They should fit snugly and be pinned securely when required. Wedges should be used to secure the axe head to the handle.

**PROTECTION:**

After the heads and handles of hand tools have been cleaned, sharpened and oiled, cutting edges should be protected. This can be done easily and economically by using cut-off lengths of old fire hose and heavy rubber bands. Slit the hose, cover the cutting edge and secure the rubber band.

All tools should be placed in a secure place for storage. A covered wood tool box works well for long term storage, as well as for transportation to a fire.