

# Seattle REconomy TOOL LIBRARY

## CHAINSAW TRAINING

### 1) Training Objectives

- a) Ensure that borrowers will use chainsaws safely, effectively, and without damage to equipment
- b) Training is focused on user knowledge level- how much/what kind of chainsaw experience does the borrower have?
- c) What kind of work does the borrower plan to do? Is a chainsaw the best tool for the job?

### 2) Chainsaw safety

- a) Most common areas of chainsaw injury:
  - i) Back of left hand; keep both hands on the saw, avoid holding work with one hand while cutting
  - ii) Lower left leg: pay attention to the progress of a cut, especially near completion; don't allow the saw to suddenly drop when a cut is complete.
  - iii) Facial injuries: results from kickback, when the tip of the bar contacts an object the direction of chain travel causes the saw to deflect upward. To prevent kickback:
    - (1) Make sure the area where the bar tip will pass is clear of obstructions
    - (2) Stand to the side away from the path of the saw if kickback does occur.
    - (3) Keep the left elbow tight, so that if kickback occurs the straightened arm will keep the saw away from the body and face.
- b) General Safety
  - i) Do not use a chainsaw while fatigued or under the influence of alcohol or other substances that could reduce judgment or reaction time.
  - ii) Wear safety gear: gloves, eye protection, ear protection, sturdy closed-toe shoes, long trousers, gloves. There is debate whether chaps provide adequate protection from an electric chainsaw, but will probably reduce the potential for injury in the case of a light or glancing contact with the chain.
  - iii) Adopt a solid stance out of the line of travel of the saw. Do not stand on a ladder or other object while sawing.
  - iv) Avoid kickback situations where the tip of the bar contacts another log or other surface.
  - v) Be mindful of where the cut piece will fall, and where the bar will be when the cut is complete.
  - vi) Do not use a saw with a dull or loose chain.
  - vii) Never touch the chain unless the saw is unplugged/battery removed.
  - viii) Constantly be aware of where the bar is, where it's going, and that you or other objects you don't intend to cut are out of that pathway.

### 3) Effective Chainsaw Use

- a) Tie an overhand knot in the cord with the plugs in the middle of the knot; make sure the cord is out of the way of the planned cut.
- b) Stable, comfortable stance, out of the line of the cut, as described above.
- c) Ensure kickback lever switch (if so equipped) is back so the switch is “on”.
- d) Press trigger lock button on left side of handle, then trigger to start saw.
- e) Get the chain up to full speed before starting the cut, especially with battery saws.
- f) Cut with the portion of the bar closest to the body of the saw.
- g) Let the weight of the saw do the work.
- h) Engage the bumper spikes in the log, use them as a fulcrum, levering the handle of the saw up to increase cutting force
- i) Know whether you’re cutting into the “compression” side of the wood (wood is supported on both sides of the cut) or the “tension” side (wood is suspended only on one side). Cutting into the compression side can result in the bar being trapped as the sides of the cut press together. Cut from underneath, or cut partially from the top and finish the cut from underneath.
- j) Make sure the chain is sharp- fine sawdust (rather than chips), slow cutting, and smoking are symptoms of a dull chain. Continuing to use a dull chain is inefficient and can wear the chain excessively, shortening its life.
- k) If the saw slows down or stops it is jammed in the cut (see “compression” above), being pushed too hard into the wood.
- l) Saws of this type are for limbing and bucking (ie, cutting firewood). Do not fell trees larger than a few inches.
- m) For wood smaller than 2” in diameter a reciprocating saw may be a better choice

### 4) Avoiding damage to the chainsaw

- a) Keep the chain oiled- fill the oil reservoir, pump the oiler frequently if the saw doesn’t oil automatically.
- b) Make sure the chain tension is correct; when you pull the chain away from the bar and then release it, it should snap back. A loose chain could fly off and injure the user.
  - i) To adjust chain tension: loosen the bar nut(s), turn the adjusting screw to proper tension, and then re-tighten the nut(s). Tension adjusters vary among saws, be sure you’re familiar with the one you are using.
- c) If the chain comes in contact with nails, rocks or dirt it will dull quickly. Clean the surface of the wood before cutting, especially roots.
- d) Clean the saw before returning- remove side cover, brush/blow/wipe out dust, chips, oil in cover and around drive sprocket.
- e) Notify the check in volunteer if the chain is dull or there are any other maintenance/repair needs.