Trimmer and Brushcutter Safety
ACLP Safety & Tools Workshop

Three areas of concern regarding safety when using trimmers and brushcutters:
1) Operator safety
2) Proper use of equipment
3) Startup and operation
4) Transportation and storage

Overview:
Large zone: All other humans and/or animals should not be within the danger zone at any time an operator is working. The danger zone is 50 feet (15 meters) in all directions around the operator.

Danger zone: Carelessness or not following the recommended safety practices is the most common cause of an accident when using power equipment.

1) Operator Safety – most important safety consideration for any activity
   a. The operator should always be in good physical and mental health
   b. Do not operate any equipment or machinery when under the influence of alcohol, medication or any substances that can impair vision, dexterity and/or judgment
   c. Always read the safety and operator's manuals before operating any piece of equipment
   d. Never allow children near or to use equipment
   e. Personal protection
      i. Clothes should be trim fitting; do not wear loose clothing
         1. Jackets should be zipped or snapped
         2. Shirts should be tucked into pants
         3. Long pants
         4. No loose or dangling clothing; i.e. scarves, neck ties or jewelry
      ii. Sturdy shoes with non-skid soles, no open-toed shoes, no bare legs or bare feet
      iii. Always wear eye protection that meets current ANSI, (American National Standards Institute) Z87.1 should be stamped or printed somewhere on the protective eyewear. Prescription glasses may and should be worn under safety glasses, not in place of safety glasses. Eye protection will protect eyes from infection.
      iv. Leather gloves will improve grip
      v. Disposable dust masks
      vi. OSHA (Occupational Safety and Health Administration) requires hearing protection for more than two hours of operation. Hearing damage can be
Reduced by use of either headset-type protectors or earplugs. Hearing protection will reduce noise levels and prevent objects from entering the ear.

vii. Logger’s chaps should be worn with cutters having metal blades

2) Proper Use of Equipment
   a. Basic equipment components:
      i. Starter switch
      ii. Fuel cap
      iii. Starter grip
      iv. Muffler cover
      v. Throttle lever
      vi. D-handle
      vii. Nylon head shield
      viii. Cut off knife
      ix. Nylon cord
     x. Blades
     xi. Quick release harness clamp
   b. Always know how to stop the unit immediately if necessary
   c. Curved-shaft units have heads that rotate clockwise. Straight-shaft units have heads that rotate counter clockwise. The direction of rotation determines which side to cut and what direction debris is directed.
   d. Equipment checks before use:
      i. Check the cutting head for correct assembly
      ii. Tighten fastening parts
   e. Fuel:
      i. Check for fuel leaks before starting the unit
      ii. The fuel tank cap should be tightened securely
      iii. When adding fuel, always follow operator’s manual, wipe up any spilled fuel immediately
      iv. Add fuel only outdoors, never indoors
      v. Fuel tank may be under pressure, loosen fuel cap slowly
      vi. After filling tank, move at least 10 feet away from refueling site before starting engine
      vii. Do not smoke or bring sparks or flame near the fuel supplies
      viii. Never refuel when the engine is hot
     ix. Never add fuel to a running engine
   f. Never operate machinery without shield and other protective devices in place
   g. Blades:
      i. Use proper tools when changing blades
      ii. Always inspect blades before each use
      iii. Install blades correctly, as per operator’s manual
      iv. Always use shape blades
     v. Do not use unauthorized blades
   h. A shoulder harness can be used to help support the weight of the unit
      i. Use a harness clamp on the shoulder strap to balance the unit, adjust the handle for balance
i. The cutting head and debris shield should be level in all directions
j. The cutting line or blade should be kept away from feet and legs
k. Do not attempt to cut with loose or over tightened blades
l. Rebalance the unit each time after changing the blade or nylon cord

3) Startup and Operation
   a. Inspect the work area and surroundings, remove any litter or other problematic objects
   b. There should be good visibility and adequate light
c. If cutting near people or cars, use low throttle speed
d. Do not operate near electrical conduits, house wiring or power lines
e. Starting procedures:
   i. Never start unit when holding up above the ground, always use good support. Keep both hands on the handles and controls.
   ii. Lay unit down on clear surface
   iii. Set controls for starting
f. Make certain line or cutting area is not touching anything
g. Direct debris away from you
h. Do not raise cutting head above knee height
i. If unit begins to shake, stop immediately
j. Never operate the unit with only one hand, keep both hands on the handles
k. Do not hold anything you are cutting
l. Do not misuse the blade or nylon cord
m. Cutting techniques:
   i. Direct debris away from the operator
   ii. Trimming should be done at a slight angle
   iii. Scalping and edging are done at a steep angle, hold the unit so debris is directed away from operator
   iv. Scalping and edging should never be done with a blade

4) Transportation and Storage
   a. Shut down engine
   b. Keep fingers away from all blades
c. Drain all fuel completely
d. Never store unit with fuel in the tank

Summary: Safety always begins with the operator.
- Always use extreme care when mixing or draining fuel
- Always wear recommended safety gear
- Keep bystanders away
- Be aware of hazards