National Occupational Standard
Utility Arborist
2013

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About Electricity Human Resources Canada (EHRC)

Electricity Human Resources Canada (EHRC) is a not-for-profit organization helping to keep the lights on in Canada by enabling a world-class workforce for the entire electricity industry. EHRC helps to build a better workforce by strengthening the ability of the Canadian electricity industry to meet current and future needs for a highly skilled, safety-focused, diverse and productive workforce.

For more information visit www.ElectricityHR.ca.
In addition, we would like to acknowledge the generous time and support of employers, professional associations, educational institutions, unions and other key stakeholders who were consulted as part of the development of the Line Trade Development Initiative.
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Utility Arborists are specially trained individuals who prune and/or clear brush and trees that are in close proximity to electrical lines and associated electrical equipment. They are essential to every community in Canada as their role is to maintain and restore power, in spite of challenging situations.

The following occupational description comes from British Columbia’s Industry Training Authority program profile. “Utility Arborist means a person who undertakes any work required to prune or clear vegetation in proximity (three meters or less from a primary conductor with a voltage of 750 volts or greater) to energized electrical equipment, structures and conductors or who in the course of utility line clearing operations, prunes, falls or removes trees which could come into contact with energized power lines.”

There are two main functions of a Utility Arborist, routine maintenance of power lines and post-storm clean up. Utility Arborists use various hand tools, ropes, pulleys, and chainsaws to prune, fall or remove vegetation that could come into contact with energized power equipment.

Utility Arborists may work with specialized sprayers and herbicides to further manage vegetation. Utility Arborists use rigging equipment and must employ proper safety techniques. Utility Arborists are required to wear personal protective equipment and climbing gear.

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Working Environment

Most often, the work of a Utility Arborist takes place outdoors in a variety of weather conditions, on a year-round basis. It is not uncommon for a Utility Arborist to be in high demand during the winter months when frequent snow and ice storms cause damage to trees. During peak season, a Utility Arborist may have to work long hours and/or be on-call 24 hours a day to clean up dangerous or emergency situations. Utility Arborists may work on the ground, from insulated bucket aerial devices, insulated ladders, and/or aloft in trees. It is vital that they are comfortable working at great heights. Work sites are wide-ranging and frequently changing. They work in rural and urban settings and may be required to travel as work sites change. Work sites can often be very noisy and dirty with high volumes of dust, pollen, foliage, tree bark and other debris. Utility Arborists may encounter dangerous insects and/or wildlife.

Physical Requirements

The work of a Utility Arborist is physically demanding. Daily tasks include trimming, pulling, dragging, piling and lifting brush and tree limbs. On average, a Utility Arborist must be able to lift up to twenty kilograms. Utility Arborists need to have good hand-eye coordination and good manual dexterity, as well as the strength and agility required to climb trees. It can also be important for a Utility Arborist to have colour perception when working with electrical wires as well as depth perception when working at heights.

Human Interaction

Utility Arborists often work with a partner or as part of a crew of two to six people. They must be team players and willing to take direction and orders from their Supervisor. If a Utility Arborist aspires to be a supervisor or foreman, they should feel comfortable in making decisions and advising crew members. There are times when a Utility Arborist will need to interact with customers when completing a project. They need to be able to listen to the customer’s needs to ensure the job is done properly. It may be the case that the Utility Arborist will have to seek consent from landowners before they are able to undertake a project.

More often, Utility Arborists need to find a balance between keeping electrical lines free and clear of vegetation while trying their best to maintain the function and aesthetic of the vegetation. It is not uncommon for a Utility Arborist to belong to an industry association. They may be encouraged to speak in front of an audience of peers or take on a leadership role in an association. Utility Arborists may engage in workshops and training classes.
### Tools, Equipment, Supplies & Materials

- Augers and Bits
- Axes
- Backhoe
- Brooms
- Brush saws
- Carabiners
- Chainsaw
- Clevis
- Communication devices
- Computer
- Connectors
- Digger derrick
- Drills
- Dump truck
- Extension cords
- Felling levers

- Friction devices
  - Gas powered tools
  - Handsaw
  - Knives
  - Ladders
  - Loppers
  - Maintenance and adjustment tools
  - Mallets
  - Man lift
  - Multi-sheave block
  - Notepad
  - Nylon web
  - Picks
  - Pickup truck
  - Pole climbing equipment
  - Pole pruners
  - Pole saws
  - Rakes
  - Reference materials (books, manuals)

- Rigging blocks
- Rigging ropes
- Rope
- Rope pullers
- Secateurs
- Shovels/Spades
- Sledge hammers
- Sling shot
- Slings
- Synthetic rope
- Tackle blocks
- Throw pouch
- Tree climbing rope
- Tree climbing saddle
- Wedges
- Whoopie
- Wire cutters
- Wire rope

### Personal Protective Equipment (PPE)

- Chainsaw pants, chaps, whistle and pressure dressing
- Dielectric gloves
- Ear muffs or ear plugs
- Fall arrest harness and lanyard
- Hard hat, including chin strap
- High visibility clothing
- Leather gloves
- Protective safety glasses and face screens
- Safety toed boots
- Tree climbing belt and spurs

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Photos: Hydro Ottawa
Knowledge, Abilities & Skills

- Analytical skills
- Best management practices
- Climb trees
- Communication skills
- Conflict resolution skills
- Electrical systems knowledge
- Federal, provincial, municipal regulations
- Identification of various hazards
- Knowledge of arboriculture
- Map reading
- Math skills
- Occupational Health and Safety and other regulations
- Organizational skills
- People skills
- Planning
- Problem solving skills
- Relevant experience in the field
- Traffic control skills
- Training, coaching, mentoring, supervising, evaluating performance
- Traffic control skills
- Training, coaching, mentoring, supervising, evaluating performance

Behaviours, Attitudes & Personal Characteristics

- Able to manage stress
- Agility
- Analytical
- Committed to professional development
- Customer service-oriented
- Interpersonal
- Leadership skills
- Mechanically inclined
- Multi-task
- Positive attitude
- Problem solver
- Respect for heights
- Stamina
- Strength
- Team player

Photo: Hydro Ottawa
## Utility Arborist DACUM Chart

### A  Implement Safe Working Practices

<table>
<thead>
<tr>
<th>A.01</th>
<th>A.02</th>
<th>A.03</th>
<th>A.04</th>
<th>A.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement emergency procedures</td>
<td>Adhere to safe policies and procedures</td>
<td>Organize traffic control</td>
<td>Identify electrical hazards</td>
<td>Verify proximity of electrical structures and components</td>
</tr>
<tr>
<td>A.06</td>
<td>A.07</td>
<td>A.08</td>
<td>A.09</td>
<td></td>
</tr>
<tr>
<td>Identify limits of approach</td>
<td>Establish Communication with System Controller</td>
<td>Select personal protection equipment</td>
<td>Ensure equipment maintenance</td>
<td></td>
</tr>
</tbody>
</table>

### B  Coordinate Work Activity

<table>
<thead>
<tr>
<th>B.01</th>
<th>B.02</th>
<th>B.03</th>
<th>B.04</th>
<th>B.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review work orders</td>
<td>Prioritize work orders</td>
<td>Implement tailboard</td>
<td>Implement work orders</td>
<td>Confirm notification process is adhered to</td>
</tr>
</tbody>
</table>
### B.06 Notify landowners per municipality utility requirements if possible

### B.07 Supervise project activity

### B.08 Conduct post job inspection

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#### C Climb Trees & Ladders

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C.01</strong></td>
<td>Inspect and wear climbing gear</td>
</tr>
<tr>
<td><strong>C.02</strong></td>
<td>Conduct pre-climb inspection</td>
</tr>
<tr>
<td><strong>C.03</strong></td>
<td>Select climbing method</td>
</tr>
<tr>
<td><strong>C.04</strong></td>
<td>Operate insulated aerial device</td>
</tr>
<tr>
<td><strong>C.05</strong></td>
<td>Ascend to point of activity</td>
</tr>
<tr>
<td><strong>C.06</strong></td>
<td>Descend from work position</td>
</tr>
<tr>
<td><strong>C.07</strong></td>
<td>Perform aerial rescue</td>
</tr>
</tbody>
</table>

---

#### D Rig to Control Tree Section

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D.01</strong></td>
<td>Select appropriate gear</td>
</tr>
<tr>
<td><strong>D.02</strong></td>
<td>Tie knots</td>
</tr>
<tr>
<td><strong>D.03</strong></td>
<td>Ensure rigging limits for load are observed</td>
</tr>
<tr>
<td><strong>D.04</strong></td>
<td>Set up rigging system</td>
</tr>
<tr>
<td><strong>D.05</strong></td>
<td>Perform safety check of rigging system</td>
</tr>
<tr>
<td><strong>D.06</strong></td>
<td>Maintain rigging tools and equipment</td>
</tr>
</tbody>
</table>

---

#### E Prune Designated Vegetation

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E.01</strong></td>
<td>Identify vegetation to be controlled</td>
</tr>
<tr>
<td><strong>E.02</strong></td>
<td>Verify work order instructions</td>
</tr>
<tr>
<td><strong>E.03</strong></td>
<td>Rig pieces for removal</td>
</tr>
<tr>
<td><strong>E.04</strong></td>
<td>Position to conduct pruning activity</td>
</tr>
<tr>
<td><strong>E.05</strong></td>
<td>Conduct pruning activity</td>
</tr>
<tr>
<td><strong>E.06</strong></td>
<td>Manage cut vegetation</td>
</tr>
<tr>
<td><strong>E.07</strong></td>
<td>Block tree trunk</td>
</tr>
</tbody>
</table>
**Fell Designated Tree**

<table>
<thead>
<tr>
<th>F.01</th>
<th>F.02</th>
<th>F.03</th>
<th>F.04</th>
<th>F.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish felling zone</td>
<td>Prepare felling site</td>
<td>Implement felling process</td>
<td>De-limb tree trunk</td>
<td>Buck wood</td>
</tr>
<tr>
<td>F.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dismantle rigging and tools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Participate in Professional Development Activities**

<table>
<thead>
<tr>
<th>G.01</th>
<th>G.02</th>
<th>G.03</th>
<th>G.04</th>
<th>G.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain personal fitness</td>
<td>Maintain associated certifications*</td>
<td>Participate in professional associations</td>
<td>Read professional publications</td>
<td>Participate in professional training</td>
</tr>
<tr>
<td>G.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentor less experienced workers</td>
<td>e.g. first aid, chainsaw safety, pesticide application permits</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Utility Arborist: National Occupational Standard

### A Implement Safe Working Practices

<table>
<thead>
<tr>
<th>Category/Task</th>
<th>Sub-tasks</th>
<th>Supporting Knowledge and Abilities</th>
</tr>
</thead>
</table>
| A.1 Implement Emergency Procedures| 1. identify emergency situation  
2. establish scope of emergency  
3. contact emergency personnel  
4. implement emergency procedures | Knowledge of:  
-organization’s emergency procedures  
Ability to:  
-assess                                               |
| A.2 Adhere to Safe Policies and Procedures | 1. implement safety first policy  
2. mentor new employees on safety procedures and hazards  
3. check workplace for unsafe work practices  
4. correct unsafe work practices | Knowledge of:  
-safe work practices  
-corrective process for unsafe work  
Ability to:  
-identify hazards  
-mitigate hazards |
| A.3 Organize Traffic Control      | 1. establish perimeters  
2. place barriers and signage  
3. assign traffic/pedestrian control person | Knowledge of:  
-work zones  
-federal, provincial and municipal regulations  
Ability to:  
-use signage and barriers  
-direct traffic  
-follow appropriate regulations |
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Knowledge of</th>
<th>Ability to</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.4</td>
<td>Identify Electrical Hazards</td>
<td>1. perform hazard assessment 2. assess weather conditions 3. assess tree structure 4. identify electrical components and voltages 5. determine proper safe work procedure</td>
<td>-utility electrical regulation -electrical hazards -electrical configuration -electrical safety equipment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-assess -analyze -plan</td>
</tr>
<tr>
<td>A.5</td>
<td>Verify Proximity of Electrical Structures and Components</td>
<td>1. identify sources of electrical hazards 2. identify utility overhead and underground structures and components 3. employ methods of electrical hazard abatement 4. establish limits of approach 5. apply health and safety regulations</td>
<td>knowledge of: -basic electrical principles and terms -basic power line systems -methodology for appropriate system protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ability to: -assess -delegate</td>
</tr>
<tr>
<td>A.6</td>
<td>Identify Limits of Approach</td>
<td>1. identify proper voltage of line 2. consider seasonal factors 3. establish designated limits of approach</td>
<td>Knowledge of: -regulations -hazards</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ability to: -interpret code -read charts -analyze multiple factors</td>
</tr>
<tr>
<td>A.7</td>
<td>Establish Communication with System Controller</td>
<td>1. identify line 2. identify geographic location 3. communicate with appropriate controller 4. request hold-off 5. communicate to discontinue hold-off</td>
<td>Knowledge of: -regional codification system -controlling authorities -communication protocol -work protection code</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ability to: -interpret code</td>
</tr>
<tr>
<td>A.8</td>
<td>Select Personal Protective Equipment (PPE)</td>
<td>1. select and wear Personal Protective Equipment 2. maintain PPE</td>
<td>Knowledge of: -proper use of PPE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ability to: -assess</td>
</tr>
</tbody>
</table>
### A.9 Ensure Equipment Maintenance

<table>
<thead>
<tr>
<th>Sub-tasks</th>
<th>Supporting Knowledge and Abilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. determine inspection process</td>
<td>Knowledge of:</td>
</tr>
<tr>
<td>2. determine equipment to inspect</td>
<td>-equipment maintenance</td>
</tr>
<tr>
<td>3. perform inspection</td>
<td>-inspection requirements</td>
</tr>
<tr>
<td>4. document any deficiencies</td>
<td>-equipment labels</td>
</tr>
<tr>
<td>5. correct any equipment deficiencies</td>
<td>Ability:</td>
</tr>
<tr>
<td></td>
<td>-assess</td>
</tr>
<tr>
<td></td>
<td>-mechanical aptitude</td>
</tr>
</tbody>
</table>

### B Coordinate Work Activities

<table>
<thead>
<tr>
<th>Category/Task</th>
<th>Sub-tasks</th>
<th>Supporting Knowledge and Abilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1 Review Work Orders</td>
<td>1. read work order</td>
<td>Knowledge of:</td>
</tr>
<tr>
<td></td>
<td>2. understand scope of work order</td>
<td>-organizational processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-utility arborist processes</td>
</tr>
<tr>
<td></td>
<td>Ability to:</td>
<td>-interpret documents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-analyze documents</td>
</tr>
<tr>
<td>B.2 Prioritize Work Orders</td>
<td>1. determine criticality</td>
<td>Knowledge of:</td>
</tr>
<tr>
<td></td>
<td>2. review resources available</td>
<td>-organizational policy and procedures</td>
</tr>
<tr>
<td></td>
<td>3. establish order</td>
<td>-impacts of electrical service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-analyze</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-plan</td>
</tr>
<tr>
<td>B.3 Implement Tailboard</td>
<td>1. record who is on site</td>
<td>Knowledge of:</td>
</tr>
<tr>
<td></td>
<td>2. record task</td>
<td>-Personal Protective Equipment (PPE)</td>
</tr>
<tr>
<td></td>
<td>3. establish hazards and barriers</td>
<td>-crew members</td>
</tr>
<tr>
<td></td>
<td>4. establish appropriate PPE</td>
<td>-work order</td>
</tr>
<tr>
<td></td>
<td>5. communicate location of electrical circuits and voltages in circuits</td>
<td>-emergency procedures</td>
</tr>
<tr>
<td></td>
<td>6. establish emergency contact information</td>
<td>-organizational processes and procedures</td>
</tr>
<tr>
<td></td>
<td>7. communicate times of issue and surrender</td>
<td>-controlling authority</td>
</tr>
<tr>
<td></td>
<td>8. establish closest medical facility</td>
<td>-hazards</td>
</tr>
<tr>
<td></td>
<td>9. establish spill procedures</td>
<td>Ability to:</td>
</tr>
<tr>
<td></td>
<td>10. communicate fire conditions</td>
<td>-plan</td>
</tr>
<tr>
<td></td>
<td>11. verify and document traffic control</td>
<td>-delegate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-prioritize</td>
</tr>
<tr>
<td>B.4 Implement Work Orders</td>
<td>1. assign tasks</td>
<td>Knowledge of:</td>
</tr>
<tr>
<td></td>
<td>2. assign resources to tasks</td>
<td>-organizational policy and procedures</td>
</tr>
<tr>
<td></td>
<td>3. check activity</td>
<td>Ability to:</td>
</tr>
<tr>
<td></td>
<td>4. sign off on task completion</td>
<td>-delegate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-prioritize</td>
</tr>
</tbody>
</table>
### B.5 Confirm Notification Process is Adhered to

- 1. establish notification process within contract
- 2. confirm notification has been made

Knowledge of:
- notification processes

Ability to:
- communicate

### B.6 Notify Landowner as per Municipality/Utility Requirements, if possible

- 1. make connection with landowners
- 2. assess site condition and get landowner agreement on existing state of property
- 3. inform landowner of work taking place
- 4. educate landowner on hazards of the job being done

Knowledge of:
- scope of work
- hazards

Ability to:
- communicate professionally
- assess

### B.7 Supervise Project Activity

- 1. review project scope
- 2. establish crew roles
- 3. inspect work in progress
- 4. correct any work that is not within scope of plan
- 5. monitor safe working activities
- 6. inform employees of any changes to workplace hazards

Knowledge of:
- work order
- utility arborist processes

Ability to:
- supervise
- delegate

### B.8 Conduct Post Job Inspection

- 1. review scope of work
- 2. review work completed
- 3. check for any deficiencies
- 4. check for any hazards
- 5. take corrective action

Knowledge of:
- operational standards
- equipment maintenance

Ability to:
- assess
- analyze
- delegate

---

### C Climb Trees & Ladders

<table>
<thead>
<tr>
<th>Category/Task</th>
<th>Sub-tasks</th>
<th>Supporting Knowledge and Abilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.1 Inspect and Wear Climbing Gear</td>
<td>1. identify defects, abrasions and wear 2. wear approved safety equipment 3. adjust safety gear 4. decommission unsafe gear</td>
<td>Knowledge of:  - inspection process  - expiry dates  - regulations  Ability to:  - assess</td>
</tr>
</tbody>
</table>
| C.2 Conduct Pre-Climb Inspection | 1. establish tree climbing hazards  
| | 2. perform whole tree assessment  
| | 3. establish line proximity  
| | 4. assess weather conditions  
| | 5. check for wildlife issues  
| | 6. determine length of job  
| | 7. inform crew of any hazards identified  
| Knowledge of: |  
| | -hazards  
| Ability to: |  
| | -assess  

| C.3 Select Climbing Method | 1. implement appropriate climbing method:  
| | -insulated aerial device  
| | -approved ladders  
| | -climbing harness and equipment  
| Knowledge of: |  
| | -climbing techniques  
| Ability to: |  
| | -assess  

| C.4 Operate Insulated Aerial Device | 1. perform pre-trip inspection  
| | 2. perform daily boom inspection  
| | 3. follow set-up procedures  
| | 4. perform hazard assessment  
| Knowledge of: |  
| | -operational procedures  
| | -equipment limitations  
| | -regulations, licensing  
| | -safe operating practices  
| Ability to: |  
| | -maneuver  

| C.5 Ascend to Point of Activity | 1. move to area of activity  
| | 2. check for hazards (physical and electrical)  
| | 3. establish safe working position  
| Knowledge of: |  
| | -climbing techniques  
| | -equipment limitations  
| Ability to: |  
| | -climb  
| | -assess  
| | -maneuver aloft  

| C.6 Descend From Work Position | 1. check for hazards before descending  
| | 2. descend at appropriate speed  
| | 3. remove climbing gear from position  
| Knowledge of: |  
| | -climbing techniques  
| | -equipment limitations  
| Ability to: |  
| | -climb  
| | -maneuver aloft  

| C.7 Perform Aerial Rescue | 1. identify cause of problem  
| | 2. identify hazards  
| | 3. contact emergency personnel  
| | 4. secure the scene  
| | 5. secure injured person  
| | 6. implement appropriate rescue technique  
| Knowledge of: |  
| | -rescue techniques  
| | -health and safety  
| | -first aid  
| Ability to: |  
| | -assess  
| | -delegate  


<table>
<thead>
<tr>
<th>Category/Task</th>
<th>Sub-tasks</th>
<th>Supporting Knowledge and Abilities</th>
</tr>
</thead>
</table>
| **D.1 Select Appropriate Gear** | 1. determine needs  
2. select appropriate equipment for task  
3. place gear in appropriate position | Knowledge of:  
- gear availability  
- gear application and limitations  
- manufacturer’s specifications  
Ability to:  
- assess |
| **D.2 Tie Knots**             | 1. select knot for proper task  
2. tie knot  
3. dress knot  
4. set knot | Knowledge of:  
- appropriate knots/mechanical devices  
- knotting techniques  
- ropes  
Ability to:  
- tie |
| **D.3 Ensure Rigging Limits for Load are Observed** | 1. identify manufacturer’s limitation specifications  
2. use industry standard rigging | Knowledge of:  
- ropes  
- working load limits  
Ability to:  
- multiply  
- measure  
- adhere to manufacturer’s safe load limitations |
| **D.4 Set up Rigging Systems** | 1. establish main line  
2. establish safety lines  
3. establish direction  
4. establish a drop zone  
5. attach equipment  
- gear  
- harness  
- carabiners  
- friction devices | Knowledge of:  
- rigging techniques  
- equipment  
- rope  
- SWL  
Ability to:  
- assess |
| **D.5 Perform Safety Check of Rigging System** | 1. check hazard area  
2. check lines  
3. check crew positions  
4. inform crew of work being performed  
5. ensure perimeter is secure  
6. ensure hazards are controlled  
7. check communication protocol | Knowledge of:  
- health and safety regulations  
- manufacturer’s specifications  
Ability to:  
- assess  
- identify hazards |
### D.6
**Maintain Rigging Tools and Equipment**

1. maintain manufacturer’s specifications
2. store under proper conditions
3. inspect on a regular basis
4. keep insulated equipment clean and dry
5. discontinue use of defective equipment

Knowledge of:
- manufacturer’s specifications
- proper storage conditions
- inspection procedures

Ability to:
- establish safe working load

---

### E Prune Designated Vegetation

<table>
<thead>
<tr>
<th>Category/Task</th>
<th>Sub-tasks</th>
<th>Supporting Knowledge and Abilities</th>
</tr>
</thead>
</table>
| **E.1 Identify Vegetation to be Controlled** | 1. identify tree/vegetation species  
2. apply species-specific control method  
3. apply appropriate control method | Knowledge of:  
- arboriculture  
- growth rates and characteristics of different species  
- best management practices  
- provincial regulations  

Ability to:  
- assess |
| **E.2 Verify Work Order Instructions** | 1. review work order at physical site  
2. establish areas to be cleared | Knowledge of:  
- work order  

Ability to:  
- assess |
| **E.3 Rig Pieces for Removal** | 1. establish safety lines  
2. secure the limb using ropes and associated equipment  
3. determine required resources  
4. determine direction of falling piece(s)  
5. ensure crew responsibilities are clearly understood  
6. ensure drop zone is clear  
7. communicate with ground crew | Knowledge of:  
- rigging techniques  
- rope  
- equipment  
- log weight chart  
- crew members  

Ability to:  
- rig  
- tie |
| **E.4 Position to Conduct Pruning** | 1. ascend or descend to safe position  
2. secure safety lines to tree  
3. ensure safety equipment or fall arrest system are in place  
4. ensure a second point of tie in to tree  
5. check safety lines  
6. hoist power tools to pruning position | Knowledge of:  
- tree hazards  
- felling direction  

Ability to:  
- maneuver aloft  
- assess |
### Conduct Pruning Activity

<table>
<thead>
<tr>
<th>Sub-tasks</th>
<th>Knowledge of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. select appropriate pruning tool</td>
<td>-hand tools</td>
</tr>
<tr>
<td>2. engage safety feature on power tools</td>
<td>-power tools</td>
</tr>
<tr>
<td>3. consider conductor position</td>
<td>-pruning techniques</td>
</tr>
<tr>
<td>4. prune according to work plan</td>
<td>-tool manufacturer’s specifications</td>
</tr>
</tbody>
</table>

**Ability to:**
- operate arborist tools
- work aloft

### Manage Cut Vegetation

<table>
<thead>
<tr>
<th>Sub-tasks</th>
<th>Knowledge of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. gather debris</td>
<td>-work order</td>
</tr>
<tr>
<td>2. apply proper disposal techniques</td>
<td>-proper carrying and lifting techniques</td>
</tr>
<tr>
<td>3. move debris to waste container</td>
<td>-disposal techniques</td>
</tr>
<tr>
<td>4. comply with disposal procedure</td>
<td>-invasive species and insects</td>
</tr>
</tbody>
</table>

**Ability to:**
- operate hand tools
- carry, lift, drag heavy objects

### Block Tree Trunk

<table>
<thead>
<tr>
<th>Sub-tasks</th>
<th>Knowledge of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. designate size of blocks</td>
<td>-power tools</td>
</tr>
<tr>
<td>2. employ appropriate power saws and hand tools</td>
<td>-hand tools</td>
</tr>
<tr>
<td>3. ensure safe working position</td>
<td>Ability to:</td>
</tr>
<tr>
<td>4. identify hazards</td>
<td>-operate tools</td>
</tr>
<tr>
<td>5. dispose of blocks</td>
<td>-lift, carry heavy objects</td>
</tr>
<tr>
<td>6. clean up site</td>
<td></td>
</tr>
</tbody>
</table>

**Knowledge of:**
- power tools
- hand tools

**Ability to:**
- operate tools
- lift, carry heavy objects

### Fell Designated Trees

<table>
<thead>
<tr>
<th>Category/Task</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>F.1 Establish Felling Zone</strong></td>
<td>1. determine height of tree</td>
<td>Knowledge of:</td>
</tr>
<tr>
<td></td>
<td>2. identify possible hazards</td>
<td>- occupational health and safety</td>
</tr>
<tr>
<td></td>
<td>3. establish felling direction</td>
<td>- operational processes</td>
</tr>
<tr>
<td></td>
<td>4. establish danger zone</td>
<td>- tree felling</td>
</tr>
<tr>
<td></td>
<td>5. plan escape route</td>
<td>- hazards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- work safe methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- calculate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- identify hazards</td>
</tr>
</tbody>
</table>
| F.2 Prepare Felling Site | 1. clear site of all obstructions (e.g. ground and aerial)  
2. mitigate hazards  
3. secure perimeter | Knowledge of:  
-hazards  
-proper felling techniques  
-health and safety regulations  
-traffic control  
Ability to:  
-identify hazards  
-assess |
|---|---|---|
| F.3 Implement Felling Process | 1. verify work plan  
2. establish all-clear  
3. apply felling techniques | Knowledge of:  
-work plan  
-felling techniques  
-hazards  
-felling tools  
Ability to:  
-assess  
-plan |
| F.4 De-limb Tree Trunk | 1. determine compression and tension energies  
2. determine stability of trunk  
3. employ chainsaw | Knowledge of:  
-power tools  
-hand tools  
-safety protocol  
Ability to:  
-operate power tools |
| F.5 Buck Wood | 1. designate size of blocks  
2. employ appropriate chainsaws and hand tools  
3. clean up site | Knowledge of:  
-chainsaws  
-hand tools  
-safety protocol  
Ability to:  
-operate tools  
-lift, carry heavy objects |
| F.6 Dismantle Rigging and Tools | 1. remove equipment from trees  
2. inspect equipment after use  
3. clean equipment as needed  
4. store according to specifications | Knowledge of:  
-storage procedures  
-manufacturer’s specifications  
Ability to:  
-transfer heavy equipment |
### Participate in Professional Development Activities

<table>
<thead>
<tr>
<th>Category/Task</th>
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</tr>
</thead>
</table>
| **G.1** Maintain Personal Fitness | 1. perform stretching exercises  
2. obtain proper rest  
3. hydrate  
4. be mentally alert while at work | Knowledge of:  
- physical limits  
- typical injuries  
- ergonomics  
Ability to:  
- perform strenuous tasks |
| **G.2** Maintain Associated Certifications (e.g. first aid, chainsaw safety, pesticide application permits) | 1. apply for certification  
2. obtain or upgrade qualifications  
3. maintain certifications | Knowledge of:  
- requalification periods  
- regional certification  
Ability to:  
- write examinations |
| **G.3** Participate in Professional Associations | 1. connect to appropriate professional association  
2. establish criteria for membership  
3. apply for membership | Knowledge of:  
- available associations in area  
Ability to:  
- write  
- network  
- work collaboratively |
| **G.4** Read Professional Publications | 1. access publications (e.g. in print, online)  
2. select appropriate material | Knowledge of:  
- available publications  
Ability to:  
- read |
| **G.5** Participate in Professional Training | 1. participate in training offered by employer  
2. research training offered through suppliers | Knowledge of:  
- available training programs  
Ability to:  
- work collaboratively  
- receive feedback |
| **G.6** Mentor Less Experienced Workers | 1. gain trust of less experienced worker  
2. provide positive support  
3. demonstrate best practices  
4. supervise initial application of skills | Knowledge of:  
- mentoring principle  
- adult learning styles  
Ability to:  
- transfer experience  
- coach/mentor |