

Train-the-Trainer Workshop: Implementing a Tree Planter's Guide to Reducing Musculoskeletal Injuries

Intervention Checklist

Body Part Specific Recommendations

Purpose: To provide a set of recommendations for intervention when signs or symptoms of musculoskeletal disorder is reported by a tree planter. These recommendations are intended to be implemented in cooperation with the tree planter by people who have taken the Feric workshop on implementing the Tree Planter's Guide to Reducing Musculoskeletal Injuries

Instructions: Identify the body part and explain/demonstrate recommendations to planter. Select appropriate exercise and recovery suggestions and demonstrate/practice with planter.

Body Part	Technique & Equipment Recommendations
<p>Neck <i>To address effects of awkward postures on the neck musculature</i></p>	<p>Use eyes to look down to reduce neck bending down Do not twist neck to look at seedling Use eyes to look up to next spot and try to minimize neck bending up Tighten waist belt on bags to lighten load on shoulders Avoid quick turns of the neck</p>
<p>Mid-Back <i>To address effects of repetitive motions and awkward postures on the shoulder girdle musculature</i></p>	<p>Keep shovel close, do not over-reach Keep hand below head height Keep elbow below shoulder height Minimize full arm motion when possible i.e. in sot ground. Keep elbow slightly bent when penetrating soil D-handle shovel length between fingertip and wrist height Staff shovel length below shoulder height Use kicker to reduce arm use Change arms Keep elbow close to side of body when leaning on shovel while closing hole</p>
<p>Lower-Back & Legs <i>To address the effects of repetitive bending and other awkward lower back postures that may affect the lumbar spine and pelvis</i></p>	<p>Screef only when necessary Boot screef with a forward and backward motion Keep shovel close, do not over-reach Center hole close to body Maintain the lordotic curve at the lower back when bending down Keep hips symmetrical Avoid single leg stance upon rising from being bent over</p>

Train-the-Trainer Workshop: Implementing a Tree Planter's Guide to Reducing Musculoskeletal Injuries

Intervention Checklist

Body Part	Technique & Equipment Recommendations
	<p>Stand fully erect, does not stay crouched over when moving to next spot</p> <p>Shovel length between fingertips and wrist height</p> <p>Padding on bags</p> <p>Balanced bag weights</p> <p>Bag weight < 23% of body weight/18kg/40 lb</p>
<p>Lower Arm <i>To address the effects of repetitive impact, awkward postures, and continuous gripping</i></p>	<p>Use less aggressive penetration – probe lightly</p> <p>Use kicker</p> <p>Use let-go technique, keep grip loose</p> <p>Keep wrist and elbow neutral</p> <p>Change shovel</p> <p>Change hands</p> <p>Soft rubber D handle or absorbent wrap</p> <p>Improve handle diameter fit</p> <p>Set handle offset to reduce strain on arm</p> <p>Anti-vibration gloves</p> <p>Change up techniques used to open and close hole</p> <p>Keep wrists warm</p> <p>Draw/seedling wrist:</p> <p>Keep grasp loose on seedling</p> <p>Do not rotate seedling forearm</p> <p>Avoid closing hole with fingers or back of hand with fingers straight</p> <p>Avoid rotating shovel to close hole</p> <p>Keep wrist neutral when leaning on shovel when inserting and closing hole</p> <p>Keep elbow slightly bent when penetrating soil</p>

Train-the-Trainer Workshop: Implementing a Tree Planter's Guide to Reducing Musculoskeletal Injuries

Intervention Checklist

This information can be found in the Info-Flip and/or on the Top 5 Posture Tips poster.

Body Part	Exercise/Posture Suggestions
<p>Neck <i>To address effects of awkward postures on the neck musculature</i></p>	<p>Neck recovery with towel (see poster)</p>
<p>Mid-Back <i>To address effects of repetitive motions and awkward postures on the shoulder girdle musculature</i></p>	<p>Proper shoulder blade positioning (needs material) Wall lower traps exercise (See info-flip) Face-lying lower traps exercise (see poster) Chest stretch (See info-flip) Shoulder shrugs (See info-flip)</p>
<p>Lower-Back & Legs <i>To address the effects of repetitive bending and other awkward lower back postures that may affect the lumbar spine and pelvis</i></p>	<p>Standing reverse stretch (See info-flip) Lats stretch (See info-flip) 3-point contact bending – maximum bending ability using a symmetrical bending technique while maintaining 3-points of contact (see poster) Hamstring stretch to prevent shortening on cool down (See info-flip) Lumbar recovery in truck - support/roll (see poster) Keep knees slightly bent</p>
<p>Lower Arm <i>To address the effects of repetitive impact, awkward postures, and continuous gripping</i></p>	<p>Hand warm up routine (only 1-2 shown in Info-flip) Wrist stretch (See info-flip)</p>