



ROYAL CANADIAN ARMY CADETS

GREEN STAR

INSTRUCTIONAL GUIDE



SECTION 8

EO M121.08 – APPLY “LEAVE NO TRACE” CAMPING

Total Time:

60 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-701/PG-001, *Green Star Qualification Standard and Plan*, Chapter 4. Specific uses for said resources are identified throughout the instructional guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson.

PRE-LESSON ASSIGNMENT

Nil.

APPROACH

An interactive lecture was chosen for this lesson to introduce the cadets to the concept of “Leave no Trace” camping.

INTRODUCTION

REVIEW

Nil.

OBJECTIVES

By the end of this lesson the cadet shall be expected to practice the principles of “Leave no Trace” camping during the conduct of a bivouac field training exercise (FTX).

IMPORTANCE

Expedition training is a large component of the Army Cadet Program. From corps training to the international expeditions, there are multiple opportunities to participate in expedition training. The knowledge presented in this lesson will enable the cadets to participate effectively, while respecting the environment and leaving it in its natural condition.

Teaching Point 1**Explain the seven principles of “leave no trace” camping.**

Time: 25 min

Method: Interactive Lecture



This lesson is to be delivered in the field, in two stages.

Stage 1. The instructor is required to cover the seven principles of “Leave no Trace” camping in the interactive lecture format within 15 minutes. A handout found at Annex A labelled The Principles of “Leave no Trace” Camping has been produced for the cadets’ use.

Stage 2. At the end of Stage 1 the instructor will break cadets into seven small groups, assign a principle of no trace camping to each and have them develop a charade associated with the principle. Ten minutes have been allotted for this activity.

In some areas of the country results of overuse are very apparent. Trails are so deeply eroded in some places that the tree roots form a spider web structure a foot or more above the ground. Fire rings, garbage, and bare, lifeless patches of earth are common, but those are only the obvious signs of impact. There are many others that are less evident, such as water pollution, and the elimination of various plants and animals. These are some of the reasons why the no-trace camping ethic was adopted. The following seven principles are guidelines to follow when partaking in any outdoor adventure training activity.

PLANNING AHEAD AND PREPARING

Plan ahead by considering your goals and expectations. Taking steps in advance of the trip will allow for minimum impact on the trail. Some points to help prepare include:

- **Knowing the Regulations and Special Concerns for the Areas Visited.** The environment is very diverse. Taking the time to research specific locations will aid the group in packing and preparation.
- **Preparing for Extreme Weather, Hazards and Emergencies.** Information concerning weather, possible hazards, and emergencies should never be assumed or the importance underestimated. Check with weather forecasting services and research the trip location’s seasonal weather history for any clues to weather that may be expected. Always plan for the worst weather expected, and be prepared for any emergency.
- **Carefully Planning Meals and Repackaging Food to Minimize Waste.** Reducing the amount of food you carry by carefully planning meals and repackaging food will reduce the amount of garbage carried. Eliminating such trash reduces the possibility of accidentally leaving waste behind.

TRAVELLING AND CAMPING ON DURABLE SURFACES

Trampled vegetation and eroded trails last for years, or even a lifetime. Choose to set ones feet and tents on surfaces that endure (i.e., rock, sand, gravel, dry grasses, snow, or water). The following guidelines should be adhered to:

- **Concentrating Hike on Existing Trails and Campsites.** In popular areas, focus the hike where it is obvious that other visitors have already left an impact. Travelling on areas already worn will reduce the overall impact on the environment in the long term.
- **Walking in Single File in the Middle of the Trail, Even When Wet or Muddy.** Trails travelled frequently will show signs of wear. Maintaining travel in the centre of the path will reduce wear spreading to the edges of the trail.
- **Avoid Taking Short Cuts Away From Established Trails.** Stay on trails. Short cutting around routes or obstacles may be time saving and rewarding; however, the effect on the vegetation and environment is damaging.

- **Travel on Rock, Gravel, Dry Grasses or Snow.** These surfaces are durable and can withstand the pressure of human travel. In pristine areas with no noticeable impact, groups should not walk in single file, but should disperse and travel separate routes.
- **Camping 100 Metres from Lakes and Streams.** Ground water, and water from lakes and streams, have the potential to be spoiled by increased human contact. By camping a minimum distance of 60 metres from these water sources, cadets can do their part to limit the impact on the area's ecosystem.

DISPOSE OF WASTE PROPERLY

Pack it in, Pack it Out. Inspect the campsite and rest areas for trash or spilled foods. Pack out all trash, leftover food and litter.

Disposing of Human Waste. Deposit all human waste in cat holes dug 16 to 20 centimetres deep and at least 60 metres from water sources, camps, and trails. Cover and disguise the cat hole when finished. Be sure to follow any additional direction provided by the owner or manager of the area you are training in, and to adhere to any regional directives that may be in place.

Pack Out Toilet Paper and Hygiene Projects. Soiled toilet paper and feminine products will take a considerable amount of time to decompose. Especially if hike involves many participants. Be sure to employ a suitable disposal plan.

Washing Body or Dishes. Carry water 60 metres away from streams or lakes and use small amounts of biodegradable soap. Scatter strained dishwater.

LEAVE WHAT YOU FIND

While hiking there will be many wonderful structures, intriguing objects, and items one will find interesting. Items of such nature shall be left alone for others to cherish.

- **Preserving the Past.** Cultural or historical structures and artefacts shall be left alone for all to enjoy.
- **Leave Flora and Fauna.** Plants, rocks, and animals shall be left alone and undisturbed.
- **Avoid the Construction of Structures.** While in the field, common practice is to invent or construct structures and furniture or dig trenches to make living easier; however, these actions leave a noticeable, unnatural indication of human presence in the environment. If anything is to be created out of necessity, once finished, return the environment to its original appearance.

MINIMIZING CAMPFIRE IMPACTS

The lasting impacts of traditional open fires destroy the landscape, and can be avoided by using lightweight stoves. If fires are acceptable, build minimum impact fires using an existing fire ring, pan or fire mound. Only dead and downed wood, nothing bigger than an adult's wrist, should be used. Maintain a small fire by burning all the wood down to ash, then saturating the ash with water and scattering the ash broadly. There should be little to no evidence of a fire.

RESPECT WILDLIFE

Animals in their natural environment are not used to humans. Although some wild animals adapt to human presence, others flee, sometimes abandoning their young and their preferred habitat. As guests in the environment, and as expeditionists, we should respect the wildlife by observing some simple guidelines such as:

- observing wildlife from a distance;
- never feeding the animals;
- protecting wildlife and food by storing rations and trash securely;

- controlling pets; and
- avoiding wildlife during sensitive times (i.e., mating, nesting, when raising young, or during the winter).

BEING CONSIDERATE TO OTHER VISITORS

During hiking, one will likely encounter other travelers. Be sure to afford common courtesies and respect to others, such as:

- respecting visitors, to protect the quality of their experience;
- yielding to others on the trail;
- camping away from trails and other visitors; and
- allowing nature's sounds to prevail, by avoiding loud voices and noises.

CONFIRMATION OF TEACHING POINT 1

ACTIVITY – CHARADES

Time: 10 min

OBJECTIVE

Recognize the seven principles of “Leave no Trace” camping.

RESOURCES

Nil.

ACTIVITY LAYOUT

- This activity will be a participative learning activity achieved through a small group charade. The cadets will be broken down into seven small groups and given a principle of “leave no trace” camping. The cadet groups will be expected to act out a principle while the other groups look on and guess what principle is being acted out. The following instructions detail specifically how to carry out this activity.
- Activity instructions:
 - divide cadets into seven small groups;
 - assign each group a principle of “Leave no Trace” camping;
 - give cadets 30 seconds to develop a silent charade no longer than one minute in length to present to the group;
 - in random order have cadet groups present their charade to the group;
 - if time is available, repeat charade only changing the principle each group has; and
 - the activity can be a challenge where the group with the most correct guesses wins.

Note:	This activity may also be conducted in the evening, giving the cadets more time to rehearse their charades and to then perform them.
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SAFETY

Instructor will use personal judgement during the conduct of specific charades and intervene if it is determined that safety is being jeopardized. This is a supervised activity.

INSTRUCTOR GUIDELINES

Instructors are to continuously supervise and monitor the activity to ensure the material being presented is represented correctly.

END OF LESSON CONFIRMATION

QUESTIONS

- Q1. What are the seven principles of "Leave no Trace" camping?
- Q2. When in the wilderness, squirrels are often present around the campsite. How much food should you spare to feed the animals?
- Q3. When preparing for a hike what should one check to determine what clothing will be required for the trip?

ANTICIPATED ANSWERS

- A1. (1) Plan ahead and prepare, (2) Travel and camp on durable surfaces, (3) Dispose of waste properly, (4) Leave what you find, (5) Minimize campfire impacts, (6) Respect wildlife, (7) Be considerate of other visitors.
- A2. None, animals in the wild are not to be fed.
- A3. Weather forecasts and the locations seasonal weather history.

CONCLUSION

HOMEWORK/READING/PRACTICE

Cadets should review the seven principle of "Leave no Trace" camping.

METHOD OF EVALUATION

Nil.

CLOSING STATEMENT

Expedition training is an important component of the Army Cadet Program. Knowing how to maintain our environment - giving it the respect it deserves - will be the challenge presented to cadets daily when participating in expeditions. The knowledge acquired here will enable the cadets to participate in such expeditions while leaving the environment in its natural condition.

INSTRUCTOR NOTES/REMARKS

This lesson shall be delivered during the bivouac FTX.

In some cases this lesson could be conducted as a tour of the local area, selecting areas where specific principles could be best explained.

REFERENCES

C2-011 (ISBN 0-89886-910-2) McGivney, A. (2003). *Leave No Trace, a Guide to the New Wilderness Etiquette*. Seattle, WA: Mountaineers Books.

HANDOUT – THE PRINCIPLES OF LEAVE NO TRACE CAMPING

Planning Ahead and Preparing	Travelling and Camping on Durable Surfaces
<ul style="list-style-type: none"> • Know the regulations and special concerns for the areas visited. • Prepare for extreme weather, hazards and emergencies. • Carefully plan meals and repack food to minimize waste. 	<ul style="list-style-type: none"> • Concentrate the hike on existing trails and campsites. • Walk in single file in the middle of the trail, even when wet or muddy. • Avoid taking short cuts off established trails. • Travel on rock, gravel, dry grasses or snow. • Camp 60 metres from lakes and streams.
Dispose of Waste Properly	Leave What You Find
<ul style="list-style-type: none"> • Pack it in, pack it out. • Dispose of human waste. • Pack out toilet paper and hygiene projects. • Wash body or dishes. 	<ul style="list-style-type: none"> • Preserve the past. • Leave flora and fauna. • Avoid the construction of structures.
Minimizing Campfire Impacts	Respect Wildlife
<ul style="list-style-type: none"> • Build minimum impact fires by using an existing fire ring, pan or fire mound. • Burn only dead and downed wood. • Maintain a small fire by burning all the wood down to ash, then saturating the ash with water and scattering the ash broadly. • There should be no evidence of a fire. 	<ul style="list-style-type: none"> • Observe wildlife from a distance. • Never feed the animals. • Protect wildlife and food by storing rations and trash securely. • Control pets. • Avoid wildlife during sensitive times (i.e. mating, nesting, when raising young, or during the winter).
Be Considerate to Other Visitors	
<ul style="list-style-type: none"> • Respect visitors to protect the quality of their experience. • Yield to others on the trail. • Camp away from trails and other visitors. • Allow nature's sounds to prevail. Avoid creating loud noises. 	