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Bear Habitat Field Practices

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2012 WRMRC—Portland, Oregon

Bear Habitat Field Practices



Workshop Goals

- Share recent lessons learned at NOLS in examining our bear practices
- Offer tools for decision-making in the field AND for teaching bear practices to staff and students
- Share example practices and implementation strategies
- Set you up to ask and answer critical questions about your own bear practices

What this workshop is **NOT**

- Focused on black bears
- **Incident review**



Bear Habitat Field Practices



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***I hope to leave a few minutes for questions at the end.**

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Focus Areas of Our Field Practice Review

- 1. Bear Deterrent Spray**
- 2. Education and Training**
- 3. Group Size**



Focus Area 1: Bear Deterrent Spray

Our concerns:

- Accessibility
- Lack of conditioned response



Focus Area 1: Bear Deterrent Spray

Our questions:

- How many canisters?
- **MORE!**
- Carrying methods?
 - In pursuit of the “one-hand draw”



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Focus Area 2: Education & Training

We wanted to be better at...

- **Teaching** bear practices
 - Field decision-making
 - Response to an encounter
- **AND** communicating clear **expectations** for behavior



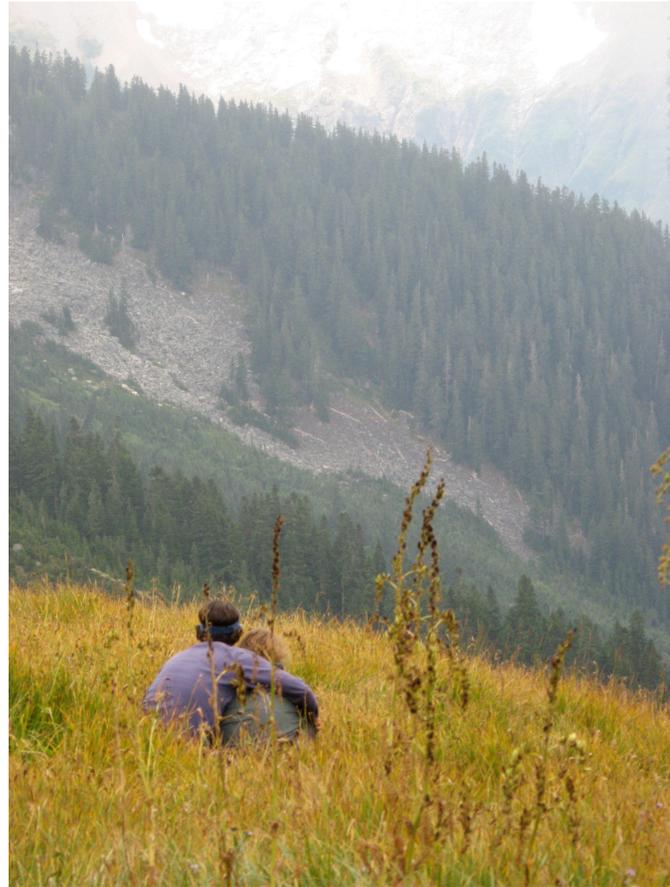
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Focus Area 3: Group Size

- What does it really mean to ‘**stay together**’?
- Renewed emphasis on the use of **the buddy system**



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Bear Habitat Field Practices



**Focus areas of
our field
practice review**

**Overview of tools
and practices**



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Managing Risk in Bear Habitat

Principal Goals

1. Strive to **avoid close encounters** with bears
2. Be prepared to **deter an attack** in the event of an encounter

***All of our practices are informed by these two goals.**



NOLS Common Bear Practices



Avoid A Close Encounter

Deter An Attack

Make frequent and loud bear calls

Students stay primarily in groups of four or more

Maintain situational awareness

Stay close to other group members

Practice bear encounter drills

Keep bear spray at hand in every group

Other examples?

Bear Awareness Triangle

Human Factor

- Activity?
- How big are we?
- Experience?
- Distractions?

Bear Factor

- Food nearby?
- Bear sign?
- Type of bear?

Situational Awareness

- Are conditions changing?
- Is this a new situation?
- How should we adapt?

The Environment

- How is environment affecting the viewshed?
- Terrain (for us and a bear)

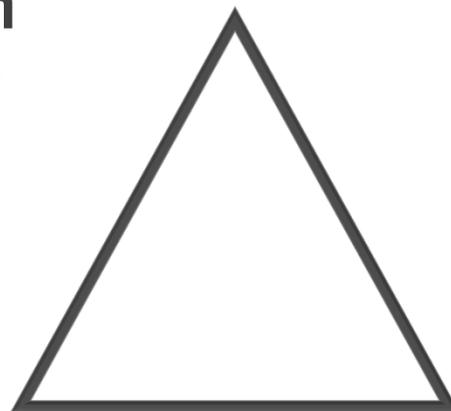


Bear Awareness Triangle

RED, **YELLOW** and **GREEN** light conditions define varying levels of risk on each side of the triangle

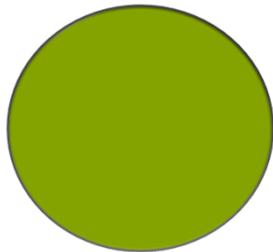
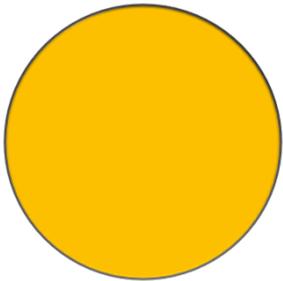
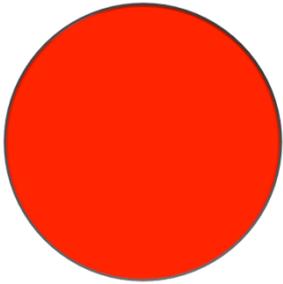
**Human
Factor**

**Bear
Factor**



Environment





Red Light Conditions

The likelihood of an encounter is high, or the group's ability to manage an encounter is hindered. Avoid these situations or be on high alert.

Yellow Light Conditions

A bear encounter should be anticipated and people should be alert.

Green Light Conditions

A close bear encounter is unlikely or can be readily managed.



Human Factor

Risk assessment using
RED, YELLOW and
GREEN light conditions

Bear Awareness Triangle

Human Factor

- Activity?
- How big are we?
- Experience?
- Distractions?

Bear Factor

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Human Factor

RED, YELLOW and GREEN light conditions

What is the activity?

- Traveling alone or as a small group
- Heading to the kitchen in early morning
- Just finished a noisy evening meeting



Human Factor

More examples of varying conditions



How big are we?

- A group of 2 to 4
- A group of 8
- The whole course plus a resupplier or a bus

What is our experience?

- Camping is new to us
- We are experienced campers, but bear practices are new
- We are experienced in this environment and with bear practices

What is distracting us?

- It's raining; we are behind schedule and arguing
- We are performing well, but it's the end of a long day
- We are well-rested, on schedule, and the weather is beautiful



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Bear Factor

Risk assessment using
RED, YELLOW and
GREEN light conditions

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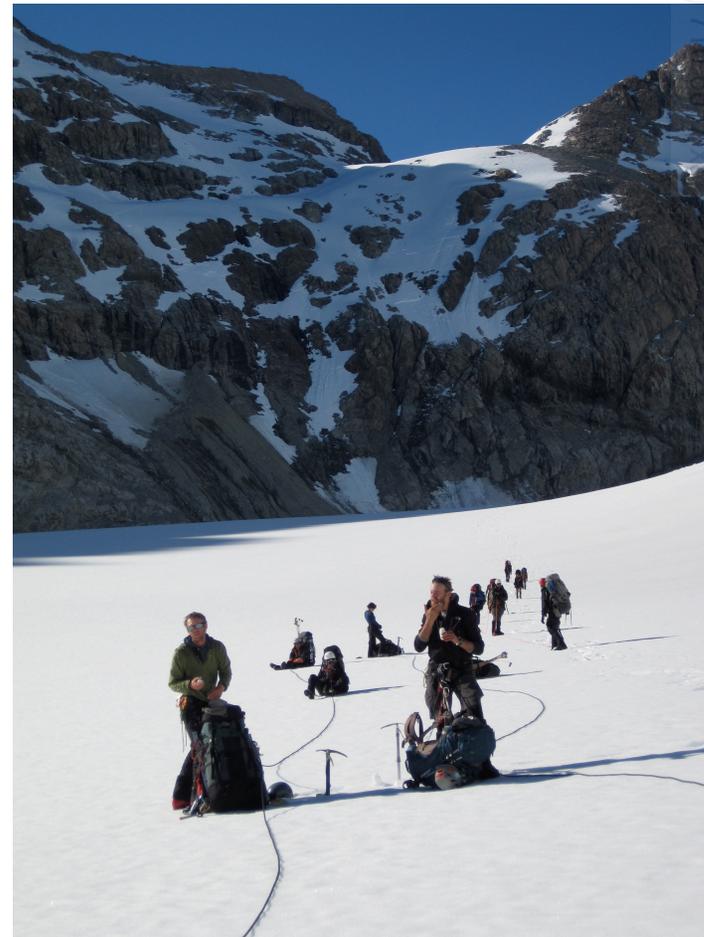
Bear Factor

RED, YELLOW and GREEN light conditions



Is there bear food nearby?

- Walking on a game trail along a salmon stream
- Walking in high tundra before berry season
- Crossing a glacier



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Bear Factor

More examples of varying conditions

Have we seen bear sign?

- Lots of recent bear sign
- Occasional old sign
- No apparent bear sign



What kind of bear?

- A sow with cubs, or a bear defending a kill
- A curious habituated bear
- A lone bear with an abundant food source



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Environment

Risk assessment using
RED, YELLOW and
GREEN light conditions

Bear Awareness Triangle

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- Activity?
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Bear Factor

- Food nearby?
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Situational Awareness

- Are conditions changing?
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The Environment

- How is environment affecting the viewshed?
- Terrain (for us and a bear)



The Environment

RED, YELLOW and GREEN light conditions



What is limiting visibility?

- Visibility is less than 25 yards
- 25 to 100 yards
- Greater than 100 yards in all directions



The Environment

More examples of varying conditions



How is scent carrying?

- Walking into a strong wind
- Cooking bacon
- Walking with the wind at our backs

How is terrain affecting our movement? Do bears have escape routes?

- Bottom of a steep, winding ravine
- On a trail paralleling a large river
- On an open plateau

How well is sound carrying?

- Walking up the bank of a loud creek on a windy day
- Walking through forest or shrubs
- One can yell across the whole valley



Specific Precautions



How are they organized?

- General practices
- Practices while traveling
- Practices while in camp

What is the intent?

- Define each practice
- Lay out the minimum standard
- Present the spectrum across which practices may vary in different conditions

Examples of Specific Precautions

From NOLS Grizzly Bear Practices



Practices While Traveling

Traveling, in contrast to camping, increases the likelihood of coming upon a bear. Even in the best conditions, travel should be considered a yellow-light activity. In general, travel calls for larger group sizes, closer proximity, and more accessible bear sprays than around camp.

Examples of Specific Precautions

From NOLS Grizzly Bear Practices



Group Size and Contiguity While Traveling

- Students should travel in groups of four or more.
- In a red-light environment (e.g. bushwhacking) group members should, ideally, be able to reach out and touch each other. In contrast, in a green-light environment, it might be appropriate to spread out by five or ten yards on the trail.

Examples of Specific Precautions

From NOLS Grizzly Bear Practices



Group Size While Traveling (cont.)

- Keeping a hiking group together requires communication and discipline... **It is paramount that the first hiker has a second person close behind.**
- Avoid splitting a hiking group up into smaller satellite groups for scouting. Multiple groups in an area have a higher likelihood of bumping into a bear than one group, and there is a possibility of accidentally surrounding a bear.

Examples of Specific Precautions

From NOLS Grizzly Bear Practices



Group Size While Traveling (cont.)

- ...It is common for instructors to travel in groups of three and sometimes two. Three and especially two-person groups call for extra caution and increased discipline. Both members of a two-person instructor team should have bear spray.

Bear Encounters

Tools for acting in an encounter

If you encounter a bear...

Stand your ground

Pull the bear spray

Round up your group

Act human: talk to the bear

Yield: don't threaten the bear,
stand until the bear leaves or
slowly back away

And THEN what to do if...

- The bear charges
- The bear keeps charging
- You are actually attacked by a grizzly
- You are being attacked by a black bear



NOLS Common Bear Practices



Avoid A Close Encounter

Make frequent and loud bear calls

Students stay primarily in groups of four or more

Maintain situational awareness

Deter An Attack

Stay close to other group members

Keep bear spray at hand in every group

Practice bear encounter drills

A final word on practices themselves...

- Practices vary by location and activity



Now, think about YOUR program...

1. Evaluate your bear practices using the Bear Awareness Triangle. Consider how well your staff are set up accurately assess conditions in each area of the triangle.

OR

2. Could your staff or students encounter red-light bear conditions on your program? Identify examples of green-, yellow- and/or red-light conditions that could be encountered, and consider whether your practices appropriately match potential conditions.



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Highlights From Year One

Our goals this summer were to...

- Increase overall awareness among staff AND students
- Move towards producing a “conditioned response” in the event of an encounter



Highlights From Year One

What did we do?

- Introduce risks and practices in town before the course
 - Briefings and videos
- Bear encounter drills in town BEFORE going to the field
 - Bears on wheels
 - Inert canisters



More bears on wheels



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Highlights From Year One

What did we do?

- Renewed emphasis on bear encounter drills **in the field**
 - Field resources
- Bear spray
 - More canisters
 - Holsters and harnesses



Highlights From Year One

How did it go?

- Successes?
 - Notable increase in overall awareness and collective competency
- Persistent challenges?
 - Yes! Lots.



Questions?



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