CHAPTER 9

PO 111 - PARTICIPATE IN RECREATIONAL SUMMER BIATHLON ACTIVITIES



COMMON TRAINING GREEN STAR INSTRUCTIONAL GUIDE



SECTION 1

EO C111.01 - PARTICIPATE IN A BIATHLON BRIEFING

Total Time: 30 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.

Confirm the number of zones within your region.

PRE-LESSON ASSIGNMENT

Nil.

APPROACH

An interactive lecture was chosen for this lesson to introduce biathlon and provide an overview of the sport.

INTRODUCTION

REVIEW

Nil.

OBJECTIVES

By the end of this lesson, the cadet shall have participated in a biathlon briefing.

IMPORTANCE

It is important for cadets to participate in a biathlon briefing because it introduces the history and components of biathlon, as well as assists in preparing for a biathlon event.

Teaching Point 1 Introduce biathlon.

Time: 10 min Method: Interactive Lecture

THE SPORT OF BIATHLON

Traditionally, biathlon consists of two activities—small bore marksmanship and free technique cross country skiing. There are other forms of biathlon competition—these competitions must include an cardiovascular activity and a marksmanship component. The marksmanship component of biathlon demands fine motor control, great stability and precision. Traditionally a .22 cal small bore rifle is used. The combination of these two very contradictory activities makes the sport of biathlon.

Biathlon is considered a life sport. The first recorded biathlon competition took place near the Swedish / Norwegian border in 1767, between companies of border guards from the two countries. Biathlon continued to develop through hunting and warfare until it was introduced as a demonstration sport at the winter Olympics in Charmoix, France in 1924. It was not until 1960 in Squaw Valley, California and a change to small bore that biathlon became a fully-sanctioned Olympic event for men. In 1992 in Albertville, France, it became an Olympic event for women as well.



Cave drawings found in Norway, depicting Nordic skiing and the carrying of a weapon, date Biathlon back more than 5,000 years.

TYPES OF RACES

There are six different types of races used in biathlon competitions in the CCM.

INDIVIDUAL

An individual race consists of a single competitor start. It is a race of varying distances based on age, gender, weather, and the geographical constraints of the course location. An individual race consists of sequential bouts of skiing and firing, which may include:

- 1. skiing;
- 2. firing five rounds;
- 3. skiing;
- 4. firing five rounds;
- skiing;
- 6. firing five rounds;
- 7. skiing; and
- 8. crossing the finish line.

The race is over when the last competitor crosses the finish line.

A time penalty of 40 seconds for every missed target is added to the competitor's final time.

SPRINT

A sprint race consists of a single competitor or group start. It is a race of varying distances based on age, gender, weather, and the geographical constraints of the course location. A sprint race consists of sequential bouts of skiing and firing, which may include:

- 1. skiing;
- 2. firing five rounds;
- skiing;
- 4. firing five rounds;
- 5. skiing and
- 6. crossing the finish line.

The race is over when the last competitor crosses the finish line.

A penalty of skiing one loop for every missed target is added to the competitor's final time.

MASS

A mass race consists of a simultaneous start. It is a race of varying distances based on age, gender, weather, and the geographical constraints of the course location. A mass race consists of sequential bouts of skiing and firing, which may include:

- 1. skiing;
- 2. firing five rounds;
- skiing;
- 4. firing five rounds;
- 5. skiing;
- 6. firing five rounds;
- 7. skiing;
- 8. fire five rounds;
- 9. skiing and
- 10. crossing the finish line.

The race is over when the last competitor crosses the finish line.

A penalty of skiing one loop for every missed target is added to the competitor's final time.

PURSUIT

A pursuit race consists of a single competitor start on random draw or results from a previous event during the same championship. It is a race of varying distances based on age, gender, weather, and the geographical constraints of the course location. A pursuit race consists of sequential bouts of skiing and firing, which may include:

- 1. skiing;
- 2. firing five rounds;

- skiing;
- 4. firing five rounds;
- skiing;
- firing five rounds;
- skiing;
- 8. firing five rounds;
- 9. skiing; and
- 10. crossing the finish line.

The race is over when the last competitor crosses the finish line.

A penalty of skiing one loop for every missed target is added to the competitor's final time.

RELAY

A relay race consists of a simultaneous start. It is a race of varying distances, based on age, gender, weather, and the geographical constraints of the course location. A relay race consists of sequential bouts of skiing and firing for each relay team member, which may include:

- 1. skiing;
- 2. firing five rounds (three spare);
- skiing;
- 4. firing five rounds (three spare);
- skiing;
- 6. tagging / touching either the torso, arms, hands, legs, feet, head or the rifle of the outgoing member of the team in the relay handover zone; and
- 7. the last skier completing the above sequence with no tagging / touching. They end the race by crossing the finish line.

The race is over when the last competitor of the last team crosses the finish line.

A penalty of skiing one loop for every missed target is added to the competitor's final time.

PATROL

A patrol race consists of a simultaneous start of a firing bout on the range. It is a race of varying distances, based on age, gender, weather, and the geographical constraints of the course location. The team must ski together with a distance of no further than 30 m apart from the first to the last skier. This distance is measured when they enter the range and cross the finish line. It may also be measured while on a skiing bout. Members of the patrol must carry patrol equipment in a pack. The equipment will vary, but usually consists of four to six wool blankets. The blankets are carried in packs and the division of the blankets is left to the discretion of the team. A patrol race consists of sequential bouts of skiing and firing, which may include:

- 1. firing up to 20 rounds;
- skiing;
- 3. firing up to 20 rounds;

- 4. skiing;
- 5. firing up to 20 rounds;
- 6. skiing;
- 7. firing unlimited rounds; and finishing when the last paddle on the target indicates a hit.

A penalty of skiing one loop for every missed target is added to the competitor's final time.

Special rules for a patrol race

- Each competitor must fire at least twice.
- Teams cannot leave the range until all targets are hit or all 20 rounds are expended.
- Crossfiring is authorized as per rule 1.9.2. from Biathlon Canada Handbook. When a member of a team
 has hit all five of their targets they may fire at their team member's target. This can only occur after
 crossfire is called and the competitor who will not be firing unloads their rifle and places it on the mat.
- Five minutes will be added to the team's final time if two competitors fire on the same target at the same time.
- Each team must stay together as a group as per rule 1.9.3. from Biathlon Canada Handbook.
- Only during a patrol race may the rifle be supported by the pack on the firing line.
- A patrol member must be wearing or carrying their pack when crossing the finish line or entering the range.
- A patrol member must finish with their pack.

End of Patrol

There is a time limit on the patrol race. At the 45-minute mark, the range is closed to incoming teams and penalties are added to the team's final time. For each ski bout not completed by the team, a 15 minute time will be added to their final time.

FINAL RESULTS FOR ALL TYPES OF RACES

Results are based on ski time(s) combined with any time credits or penalties assessed to produce a final time. First place is awarded to the team with the lowest time.

CONFIRMATION OF TEACHING POINT 1

QUESTIONS:

- Q1. What two activities make up the sport of biathlon?
- Q2. What are the six types of biathlon races used in biathlon competitions in the CCM?
- Q3. In what race is crossfiring allowed?

ANTICIPATED ANSWERS:

- A1. A marksmanship and an cardiovascular activity.
- A2. Individual, sprint, mass, pursuit, relay, and patrol races.
- A3. Only in the patrol race IAW rule 1.9.3. from the *Biathlon Canada Handbook*.

Teaching Point 2

Describe competitive events in the CCM.

Time: 15 min Method: Interactive Lecture

LOCAL CORPS (STAGE 1)

At stage one the corps Commanding Officer (CO) is the Officer of Primary Interest (OPI) and will recommend who will participate in the zone competition based on the corps' biathlon program. If no biathlon program is in place at the corps, cadets may still compete at the CO's discretion. Biathlon teams consist of three competitors of the same gender, one of which must be a junior (have not reached the 15th birthday on or before 15 March of the training year).

ZONE (STAGE 2)

At stage two cadets will compete in a zone competition with corps in the same geographical area. Corps that cannot participate in a zone competition due to geographic limitations may conduct a local competition and mail in the results to the Zone / Regional Biathlon Coordinator who is the OPI for this stage. The regional biathlon coordinator is responsible for posting the names of the competitors who will advance to the provincial / territorial competition, based on the competitor's results, and the region's total allowable competitors.

PROVINCIAL / TERRITORIAL (STAGE 3)

At stage three the number of competitors in each category will depend on the number of zones in the region, and are decided by the Regional Biathlon Coordinator who is the OPI for this stage. These categories are female team, female composite team, male team, and male composite team. Composite teams are composed of top individual competitors in a zone, who are not necessarily from the same corps. Corps teams are selected based on the aggregate score of the fastest three competitors from the corps. Individual members of corps teams do not need to be declared until after the final race results are posted.

NATIONAL (STAGE 4)

Stage four in the selection process is based on the number of teams permitted to compete per region. The OPI for this stage is the National Biathlon Coordinator. Corps teams must contain the fastest junior and fastest senior competitor, plus the next fastest skier from the same corps based on their final time from the qualifying race.

Composite teams are selected based on final race times, from the remaining competitors who are not already selected for a corps team. Each composite team will consist of the next fastest senior competitor, next fastest junior competitor, and the next fastest competitor.



Discuss regional team allowances (located at Figure 1).

Teams	Atlantic			-	Eastern	Central	Prairie			Pacific	Northern
	NF	NS	NB	PEI	QC	ON	MB	SK	AB	BC	
Female Team	1	1	1	1	1	1	1	1	1	1	
Female											
Composite	1	1	1	1	2	2	1	1	1	1	1
Team											
Male Team	1	1	1	1	1	1	1	1	1	1	
Male											
Composite	1	1	1	1	2	2	1	1	1	1	1
Team											

Note. Created by D Cdts 4, 2006, Ottawa, ON: Department of National Defence.

Figure 1 Regional Disbursement of Teams

CONFIRMATION OF TEACHING POINT 2

QUESTIONS:

- Q1. What is the minimum number of junior competitors per team?
- Q2. How many levels of competitions are there in the CCM?
- Q3. How is the composite team selected?

ANTICIPATED ANSWERS:

- A1. There is a minimum of one junior competitor per team.
- A2. There are four levels of competition:
 - corps,
 - zone,
 - provincial / territorial, and
 - national.
- A3. Composite teams are selected based on final race times, from the remaining competitors who are not already selected for a corps team. Each composite team will consist of the next fastest senior competitor, next fastest junior competitor, and the next fastest competitor.

END OF LESSON CONFIRMATION

The cadets' participation in the biathlon briefing will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK / READING / PRACTICE

Nil.

METHOD OF EVALUATION

Nil.

CLOSING STATEMENT

Biathlon is a challenging and exciting individual and team sport that is challenging, exciting and promotes physical fitness, which is one of the aims of the cadet program.

INSTRUCTOR NOTES / REMARKS

Nil.

REFERENCES

A0-036 Cadets Canada. (n.d.). Canadian cadet movement: Biathlon championship series. Ottawa, ON: Department of National Defence.

C0-084 Biathlon Canada. (2003). Biathlon Canada handbook. Ottawa, ON: Biathlon Canada.



COMMON TRAINING GREEN STAR INSTRUCTIONAL GUIDE



SECTION 2

EO C111.02 - RUN WIND SPRINTS

Total Time: 30 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.

Ensure a first aid station is set up during the practical activities.

PRE-LESSON ASSIGNMENT

Nil.

APPROACH

An interactive lecture was chosen for TPs 1 and 2 to introduce cadets to the methods of preparing for a biathlon activity and running techniques.

A practical activity was chosen for TPs 3–5 as it is an interactive way to introduce the cadets to running skills in a safe and controlled environment. This activity contributes to the development of running skills and knowledge in a fun and challenging setting.

INTRODUCTION

REVIEW

Nil.

OBJECTIVES

By the end of this lesson the cadet shall be expected to have run wind sprints.

IMPORTANCE

It is important for cadets to run wind sprints because it is a method of increasing endurance, which will be useful when participating in summer biathlon activities.

Teaching Point 1

Explain how to prepare for summer biathlon activities.

Time: 5 min Method: Interactive Lecture

CLOTHING

Clothing worn while running is important for keeping the body temperature regulated as well as providing freedom of movement. Layering clothing is important because it maintains body heat and ensures comfort while outdoors.



Show examples of the clothing used for the different layers as they are described.

The Base / Core Layer

The layer next to the skin is called the base layer. It may consist of a synthetic undershirt that is close fitting but not tight. It should be made of a material that will absorb perspiration and move it away from the skin, such as polyester.



Damp clothes draw heat from the body, even in conditions above freezing. This rapid heat loss can cause a dangerous drop in body temperature.

The Mid-Layer

The second layer, called the mid-layer, provides insulation and moves moisture away from the base layer. This layer should be snug, but not constricting. It may consist of a zip-up shirt with a high neck or a shirt with a collar. In hot weather, this layer may be used as an outside layer.

The Outer Layer

The final layer, called the outer layer, provides protection from the elements. It should allow air to circulate and excess moisture to escape. It may consist of a wind shell or a waterproof rain jacket.

It is easier to stay warm rather than trying to warm up after getting cold. Additional insulating layers may be required to keep warm when sitting still in cold temperatures. Most of the heat from a person's body is lost through the head and face. It is always best to wear something on the head regardless of the weather conditions. In the summer, a hat protects the head from the sun and provides shade, while in the winter, a hat helps stop the heat from escaping.

FOOTWEAR

Running shoes should fit comfortably when laced up. Always wear clean, dry socks when wearing running shoes.

HYDRATION

The body is made up of over 60 percent water therefore hydration is crucial, particularly when participating in physical activity. The body continuously loses water through breathing, sweating, and urinating. It is recommended that water be drunk approximately two hours before exercise, often during exercise, and after exercise. Sports drinks are an alternative to water for those who run more than 4 km at one time, or who participate in more than an hour of moderate physical activity.

NUTRITION

It is important to follow the guidelines for healthy eating outlined in *Canada's Food Guide*, particularly for those who are physically active. Meals should be eaten at least 30 minutes prior to physical activity to allow time for the food to digest.

CONFIRMATION OF TEACHING POINT 1

QUESTIONS:

- Q1. Why is it important to layer your clothing?
- Q2. What percentage of the body is made up of water?
- Q3. Where can the guidelines for healthy eating be found?

ANTICIPATED ANSWERS:

- A1. It is important to layer clothing to maintain body heat and ensure comfort while outdoors.
- A2. Over 60 percent of the body is made up of water.
- A3. They can be found in Canada's Food Guide.

Teaching Point 2

Describe running techniques.

Time: 5 min Method: Interactive Lecture

PACING

Pacing is the speed that should be run in order to cover the distance. It is essential to every runner and is important for maintaining energy and endurance. Individuals should pace themselves based on the signs felt from the body and the environmental conditions. An individual who cannot speak as they are running is considered to be running too fast or too long. This will prevent an individual from being able to run as long as runners who pace themselves accordingly.

In the beginning, the pace should be the anticipated average speed for the run. The pace may be increased at the halfway point, if this pace can be maintained for the remainder of the run. Towards the end of the run, energy should be gauged to determine if speed could be increased for the final portion of the run.



A good method for determining a comfortable pace is to use the "talk test". A runner should be able to talk comfortably while running, if not, the pace should be adjusted.

POSTURE / BODY ALIGNMENT

Having proper posture / body alignment can make running easier on the body and can increase an individual's performance. Basic techniques for posture / body alignment include keeping the hands at waist level to prevent tension in the arms and shoulders; remaining straight and erect, with head up, back straight, and shoulders level, to prevent shin splints and lower-back pain; and landing softly on the feet to avoid bouncing and to prevent wasting energy and to prevent injuries to the feet and legs.

WIND SPRINTS

Wind sprints are short bursts of high intensity movement conducted during regular aerobic activity, meant to make a person momentarily winded. For optimal benefits, physical activity must be continued after the wind

sprint is completed. Wind sprints can be conducted during any type of aerobic activity (eg, running, cycling, or swimming). Regular training with wind sprints may increase overall athletic performance.

CONFIRMATION OF TEACHING POINT 2

QUESTIONS:

- Q1. Why is pacing important for running?
- Q2. What is a good method of determining a comfortable pace for running?
- Q3. Describe one technique for posture / body alignment while running.

ANTICIPATED ANSWERS:

- A1. Pacing is important for runners to maintain energy and endurance.
- A2. The talk test is a good method of determining a comfortable pace for running.
- A3. Basic techniques for posture / body alignment include:
 - keeping the hands at waist level, to prevent tension in the arms and shoulders;
 - remaining straight and erect, with head up, back straight, and shoulders level, to prevent shin splints and lower-back pain; and
 - landing softly on the feet to avoid bouncing and to prevent wasting energy and to prevent injuries to the feet and legs.

Teaching Point 3

Conduct a warm-up activity consisting of light cardiovascular exercises.

Time: 5 min Method: Practical Activity



The following information will be explained to the cadets during the warm-up activity.

PURPOSE OF A WARM-UP

A warm-up is composed of stretches and light cardiovascular exercises designed to:

- stretch the muscles;
- gradually increase respiratory action and heart rate;
- expand the muscles' capillaries to accommodate the increase in blood circulation which occurs during physical activity; and
- raise the muscle temperature to facilitate reactions in muscle tissue.

GUIDELINES FOR STRETCHING

The following guidelines should be followed while stretching to prepare for physical activity and to help prevent injury:

- Stretch all major muscle groups, including the back, chest, legs, and shoulders.
- Never bounce while stretching.
- Hold each stretch for 10–30 seconds to let the muscles release fully.
- Repeat each stretch two to three times.
- When holding a stretch, support the limb at the joint.
- Static stretching, which is stretching a muscle and holding it in position without discomfort for 10–30 seconds, is considered the safest method.
- Stretching helps to relax the muscles and improve flexibility, which is the range of motion in the joints.
- As a guide, allow 10 minutes to warm up for every hour of physical activity.



The stretches chosen should focus on the areas of the body that will be used the most during the sports activity.

ACTIVITY

OBJECTIVE

The objective of this warm-up activity is to stretch the muscles and perform light cardiovascular exercises to prepare the body for physical activity and to help prevent injuries.

RESOURCES

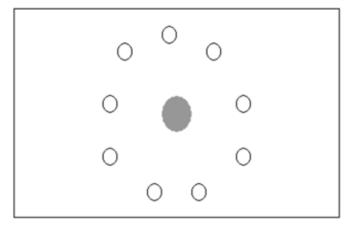
Nil.

ACTIVITY LAYOUT

Nil.

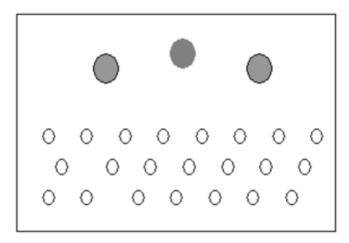
ACTIVITY INSTRUCTIONS

• Arrange the cadets in either a warm-up circle or in rows (as illustrated in Figures 1 and 2).



Note. Created by D Cdts 3, 2006, Ottawa, ON: Department of National Defence.

Figure 1 Instructor in the Centre of a Warm-Up Circle



Note. Created by D Cdts 3, 2006, Ottawa, ON: Department of National Defence.

Figure 2 Instructor at the Front with Two Assistant Instructors

- Demonstrate before having the cadets attempt each stretch / light cardiovascular exercise.
- Assistant instructors can help demonstrate the exercises and ensure the cadets are performing them correctly.
- Have cadets perform each stretch / light cardiovascular exercise.



Light cardiovascular activities should be done to warm up the muscles prior to stretching to avoid injury to or tearing of the muscles. For example, running on the spot for 30 seconds or performing jumping jacks should be performed prior to conducting the stretching activities located at Attachment A.

SAFETY

- Ensure there are at least two arm lengths between the cadets so they can move freely.
- Ensure the cadets perform the stretches and light cardiovascular exercises in a safe manner, following the guidelines for stretching listed in this TP.

CONFIRMATION OF TEACHING POINT 3

The cadets' participation in the warm-up will serve as the confirmation of this TP.

Teaching Point 4

Supervise while the cadets run wind sprints.

Time: 5 min Method: Practical Activity

ACTIVITY

OBJECTIVE

The objective of this activity is to have the cadets practice running short wind sprints.

RESOURCES

- Area with level terrain that is large enough to conduct a run, and
- A whistle.

ACTIVITY LAYOUT

Nil.

ACTIVITY INSTRUCTIONS

- Have the cadets run at a comfortable pace.
- During the run, have the cadets complete a minimum of two wind sprints. To do a wind sprint:
 - give the cadets a warning before they start the wind sprint;
 - sound the start:
 - have the cadets run as fast as they can for approximately 30 seconds;
 - sound the finish of the sprint; and
 - instruct the cadets to return to their normal pace.

SAFETY

- Ensure a designated first aider and first aid kit are available.
- Ensure water is available for the cadets after they complete the run.

CONFIRMATION OF TEACHING POINT 4

The cadets' participation in running wind sprints will serve as the confirmation of this TP.

Teaching Point 5

Conduct a cool-down session composed of light cardiovascular exercises.

Time: 5 min Method: Practical Activity



The following information will be explained to the cadets during the cool-down activity.

PURPOSE OF A COOL-DOWN

A cool-down is composed of stretches and light cardiovascular exercises designed to:

- allow the body time to slowly recover from physical activity and to help prevent injury;
- prepare the respiratory system to return to its normal state; and
- stretch the muscles to help relax and restore them to their resting length.



The stretches chosen should focus on the areas of the body that were used the most during the sports activity.

ACTIVITY

OBJECTIVE

The objective of the cool-down is to stretch the muscles and perform light cardiovascular exercises that allow the body time to recover from physical activity, and to prevent injury.

RESOURCES

Nil.

ACTIVITY LAYOUT

Nil.

ACTIVITY INSTRUCTIONS

- Arrange the cadets in either a warm-up circle or in rows (as illustrated in Figures 1 and 2 of TP 3).
- Demonstrate before having the cadets attempt each stretch / light cardiovascular exercise.
- Assistant instructors can help demonstrate the movements and ensure the cadets are performing them correctly.
- Have cadets perform each stretch / light cardiovascular exercise.

SAFETY

- Ensure there are at least two arm lengths between the cadets so they can move freely.
- Ensure the cadets perform the stretches and light cardiovascular exercises in a safe manner, following the guidelines for stretching listed in TP 3.

CONFIRMATION OF TEACHING POINT 5

The cadets' participation in the cool-down will serve as the confirmation of this TP.

END OF LESSON CONFIRMATION

The cadets' participation in running wind sprints will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK / READING / PRACTICE

Nil.

METHOD OF EVALUATION

Nil.

CLOSING STATEMENT

Wind sprints are a fun and challenging activity that may increase the overall athletic performance of an individual, which will be valuable when participating in summer biathlon activities.

INSTRUCTOR NOTES / REMARKS

Pictures of the clothing, hydration, and nutrition choices may be used in place of the actual items, if these items are not available.

REFERENCES

C0-002 ISBN 0-88962-630-8 LeBlanc, J. & Dickson, L. (1997). Straight talk about children and sport: Advice for parents, coaches, and teachers. Oakville, ON and Buffalo, NY: Mosaic Press.

C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved October 16, 2006, from http://www.marthajefferson.org/warmup.php

C0-058 Webb Physiotherapists Inc. (n.d.). *Running exercises*. Retrieved October 26, 2006 from http://www.physioline.co.za/conditions/article.asp?id=46

C0-059 Webb Physiotherapists Inc. (n.d.). *Exercises programme for squash, tennis, softball, handball.* Retrieved October 25, 2006 from http://www.physioline.co.za/conditions/article.asp?id=49

C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved October 25, 2006, from http://www.2protect.com/work3b.htm

C0-061 City of Saskatoon, Community Services Department. (2006). Stretch your limits: A smart guide to stretching for fitness. Retrieved October 26, 2006, from http://in-motion.ca/walkingworkout/plan/flexibility/

C0-078 Mountain Equipment Co-op. (2007). *Clothing info: Layering your clothing*. Retrieved February 12, 2007, from http://www.mec.ca/Main/content_text.jsp?FOLDER%3C%Efolder_id=2534374302881786&CONTENT %3C%Ecnt_id=10134198673220739&bmUID=1176745629068

C0-079 REI. (2007). *Outdoor fitness expert advice*. Retrieved February 12, 2007, from http://www.rei.com/online/store/LearnShareArticlesList?categoryld=Crosstrain

C0-080 Cool Running. (2007). *Fitness & performance*. Retrieved February 12, 2007, from http://www.coolrunning.com/engine/2/2 1index.shtml

C0-089 ISBN 0-936070-22-6 Anderson, B. (2000). *Stretching: 20th anniversary* (Rev. ed.). Bolinas, CA: Shelter Publications, Inc.

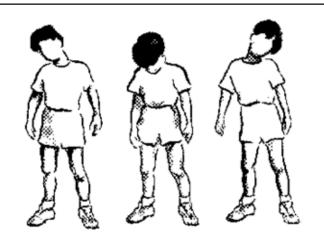
C0-100 ISBN 0-662-44467-1 Health Canada. (2007). *Canada's food guide*. Ottawa, ON: Her Majesty the Queen in Right of Canada.

C0-147 The HealthCentral Network. (2007). *MyDietExcercise.com: Winds sprint your way to fitness*. Retrieved April 17, 2007, from http://www.healthcentral.com/diet-exercise/fitness-survival-guides-81076-137.html

C0-154 Hansen, B. (1999). *Moving on the spot: Fun and physical activity: A collection of 5 minute stretch and movement sessions*. Retrieved October 26, 2006, from http://lin.ca/resource/html/dn3.htm#l1

SAMPLE STRETCHES

a. Neck:



Note. From Moving on the Spot: A Collection of 5 Minute Stretch and Movement Sessions, by B. Hanson, (1999), Toronto, Ontario: Toronto Public Health. Retrieved October 26, 2006, from http://www.lin.ca/resource/html/dn3.htm#l1

Figure A-1 Neck Stretch

Slowly roll your head across your chest from shoulder to shoulder. Do not roll your head backwards.

b. Shoulders:



Note. From Moving on the Spot: A Collection of 5 minute Stretch and Movement Sessions, by B. Hanson, (1999), Toronto, Ontario: Toronto Public Health. Retrieved October 26, 2006. from http://www.lin.ca/resource/html/dn3.htm#l1

Figure A-2 Shoulder Push

Stand and extend your arms behind you, interlocking your fingers. Push up and back with your shoulders.

Hold this position for a minimum of 10 seconds.



Note. From Moving on the Spot: A Collection of 5 minute Stretch and Movement Sessions, by B. Hanson, (1999), Toronto, Ontario: Toronto Public Health. Retrieved October 26, 2006, from http://www.lin.ca/resource/html/dn3.htm#l1

Figure A-3 Shoulder Shrug

Stand and raise your shoulders as high as possible and then lower your shoulders, stretching your neck up.

Pull your shoulders back as far as possible and then round your shoulders forward by pushing your shoulders forward as far as possible.

Hold each position for a minimum of 10 seconds.



Note. From Warm Ups, by Martha Jefferson Hospital, Copyright 2001 by Martha Jefferson Hospital. Retrieved October 26, 2006, from http://www.marthajefferson.org/warmup.php

Figure A-4 Arm Circles

Hold your arms straight out, palms up. Make small circles with your arms, gradually increasing the size.

Reverse the direction of your circles.



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http://www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-5 Shoulder Stretch

Either standing or sitting, take your right arm in your left hand and bring it across your chest, supporting the joint by holding it behind the elbow. Pull lightly on the elbow towards your chest. You should feel the stretch in your right shoulder.

c. Arms:



Note. From Exercises. Copyright 1998 by Impacto Protective Products Inc. Retrieved October 26, 2006, from http://www.2protect.com/home.htm

Figure A-6 Wrist Rotations

Rotate your hands in circular motions at the wrist.

Change direction and repeat on both sides.



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http:// www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-7 Triceps Stretch

Stand and bring your right arm over your head, bent at the elbow. Use your left hand to gently pull your arm down.

Hold this position for a minimum of 10 seconds and repeat on the opposite side.



Note. From Exercise Programme for Squash, Tennis, Softball, Handball. Retrieved October 26, 2006, from http://www.physionline.co.za/conditions/article.asp?id=49

Figure A-8 Forearm Stretch

In a kneeling position, place your hands on the floor in front of you turned so that your fingers are pointing toward your knees, and your thumbs are pointing out. Keeping your hands flat on the floor, lean back.

Hold this position for a minimum of 10 seconds.

d. Chest and Abdominals:



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http:// www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-9 Chest Stretch

Stand facing a wall. With your right arm bent and your elbow at shoulder height, place your palm against the wall. Turn your body away from your right arm. You should feel the stretch on the front side of your armpit and across the front of your chest.

Hold this position for a minimum of 10 seconds and repeat on the opposite side.



Note. From Moving on the Spot: A Collection of 5 minute Stretch and Movement Sessions, by B. Hanson, (1999), Toronto, Ontario: Toronto Public Health. Retrieved October 26, 2006, from http://www.lin.ca/resource/html/dn3.htm#11

Figure A-10 Side Stretch

Stand with your left arm up over your head. Bend at your waist towards the right side of your body.

e. Back:



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http:// www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-11 Lower Back Stretch

Lie on your back and bring your knees toward your chest. Grasp the back of your knees.

Hold this position for a minimum of 10 seconds.



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http:// www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-12 Upper Back Stretch

Extend your arms straight in front of you at shoulder height crossing one arm over the other. With the palms facing each other, intertwine your fingers and press out through your arms. Let your chin fall to your chest as you exhale. You should feel the stretch in the upper back.

f. Legs:



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http://www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-13 Hamstring Stretch

Lie flat on the floor with your knees bent and your back flat on the floor. Slowly raise and straighten one leg, grasping it behind your thigh with both hands.

Hold this position for a minimum of 10 seconds.



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http://www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-14 Inner Thigh Stretch

Sit on the floor with your knees bent and the soles of your feet together. Grab your toes and pull yourself forward while keeping your back and neck straight.

Hold this position for a minimum of 10 seconds.

Grab your ankles and push your knees down toward the floor with your elbows.

Hold this position for a minimum of 10 seconds.



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http:// www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-15 Hip Flexor

Kneel on your right knee. Position your left foot in front of you, bending your knee and placing your left hand on that leg for stability. Keep your back straight and abdominal muscles tight. Lean forward, shifting more body weight onto your front leg. You should feel the stretch in the front of your hip and the thigh of the leg you are kneeling on. Cushion your kneecap with a folded towel if necessary.

f. Legs Continued:



Note. From Running Exercises. Retrieved October 26, 2006, http://www.physionline.co.za/conditions/article.asp?id=46

Figure A-16 Ankle Rotations

From a sitting position, rotate your foot in a clockwise, and then a counter-clockwise, direction.

Switch and repeat on the opposite side.



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http:// www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-17 Calf Stretch

Stand three steps away from and facing a wall. Step in towards the wall with your right leg, bending your right knee and keeping your left leg straight. Extending your arms with your palms forward, reach out to the wall and let your body fall toward the wall. Keep your toes forward and your heels down. Lean your body into the wall with your left leg straight behind your body. You should feel the stretch in your left calf.

Hold this position for a minimum of 10 seconds and repeat on the opposite side.



Note. From Smart Start: A Flexible Way to Get Fit. Retrieved October 26, 2006, from http:// www.in-motion.ca/walkingworkout/plan/flexibility/

Figure A-18 Quadriceps Stretch

Stand with your hand against a wall for balance. Lift your left foot off the ground, bending your knee as if you are trying to kick your bottom with your heel. Do not lean forward at the hips. Grab and hold your ankle with your left hand. You should feel the stretch in your left thigh.

A-CR-CCP-701/PF-001 Attachment A to EO C111.02 Instructional Guide

THIS PAGE INTENTIONALLY LEFT BLANK



COMMON TRAINING GREEN STAR INSTRUCTIONAL GUIDE



SECTION 3

EO C111.03 - SIMULATE FIRING THE CADET AIR RIFLE FOLLOWING PHYSICAL ACTIVITY

Total Time: 30 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.

Photocopy EO C111.02 Attachment A for TPs 3 and 5.

Construct a range IAW Chapter 1, Section 8 of A-CR-CCP-177/PPT-001 Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual.

PRE-LESSON ASSIGNMENT

Nil.

APPROACH

An interactive lecture was chosen for TPs 1–2 to introduce techniques to decrease heart rate prior to firing the cadet air rifle at the Biathlon Air Rifle Target (BART).

A practical activity was chosen for TPs 3–5 as it is an interactive way to allow the cadets to experience firing the cadet air rifle following physical activity in a safe and controlled environment.

INTRODUCTION

REVIEW

Nil.

OBJECTIVES

By the end of this lesson the cadet shall be expected to fire the cadet air rifle following physical activity.

IMPORTANCE

It is important for cadets to fire the cadet air rifle following physical activity because these techniques will be useful when participating in summer biathlon activities.

Teaching Point 1

Identify techniques to decrease heart rate prior to firing the cadet air rifle.

Time: 5 min Method: Interactive Lecture

TECHNIQUES TO DECREASE HEART RATE

Cardiovascular Fitness

One of the best methods to maintain a lower heart rate is to be physically fit. Being physically fit will also allow the heart to return to the resting heart rate quicker than someone who is not physically fit. The faster the heart rate decreases, the faster, and potentially more accurately firing may commence. A slower heart rate will also reduce the risk of movement and improve motor skills while firing.

VISUALIZATION

Visualization is seeing what you want to achieve. It is a practiced skill. Believing in oneself is directly linked to performance / outcome. To visualize, find a quiet place, close your eyes, and create a mental image of what you want to achieve. As with anything, the more one practices, the clearer the images will become. Visualizations should be positive and realistic. The purpose of visualizations for summer biathlon at this level is to visualize the heart rate slowing down and returning to the resting heart rate.

ACTIVITY

Time: 2 min

OBJECTIVE

The objective of this activity is to visualize better performance.

RESOURCES

Nil.

ACTIVITY LAYOUT

Nil.

ACTIVITY INSTRUCTIONS

- 1. Have the cadets spread out around the room.
- 2. Instruct the cadets to hold their right arm out, turn as far to the right as they can without moving their feet, and point at a spot on the wall.
- 3. Instruct the cadets to return to their original standing position.
- 4. Have the cadets close their eyes and visualize themselves pointing at a spot on the wall that is farther than their original spot.
- 5. While keeping their eyes closed, have the cadets point to that spot on the wall using the same method outlined in step two.
- 6. Have the cadets open their eyes and see how far they have pointed.

SAFETY

Nil.

CONFIRMATION OF TEACHING POINT 1

The cadets' participation in the activity will serve as the confirmation of this TP.

Teaching Point 2

Describe the Biathlon Air Rifle Target (BART).

Time: 5 min Method: Interactive Lecture

TARGETS

The BART has the following characteristics:

- five 35 mm diameter drop plate targets,
- pop-up paddles for visual confirmation, and
- a manual reset with a 10 m pull cord.

This target has five black circular targets on white backgrounds. When a target is hit, a white paddle pops up, covering the circle. Once a round of firing is complete and the lane scorer has recorded the score, the cord is pulled and the target is reset.



Note. From "Biathlon Style Airgun Target", by Devin Mfg., Inc., 2005, Devin Manufacturing Incorporated, Copyright 2005 by Devin Mfg., Inc. Retrieved February 15, 2007 from http://www.devinmfg.com/targets1.html

Figure 1 BART

CONFIRMATION OF TEACHING POINT 2

QUESTIONS:

- Q1. What does BART stand for?
- Q2. What is one of the characteristics of the BART?
- Q3. How many targets are on the BART?

ANTICIPATED ANSWERS:

- A1. Biathlon Air Rifle Target.
- A2. The Biathlon Air Rifle Target (BART) has the following characteristics:
 - five 35 mm diameter drop plate targets,
 - pop-up paddles for visual confirmation, and
 - a manual reset with a 10 m pull cord.
- A3. There are five targets on the BART.

Teaching Point 3

Conduct a warm-up session composed of light cardiovascular exercises.

Time: 5 min Method: Practical Activity



The following information will be explained to the cadets during the warm-up activity.

PURPOSE OF A WARM-UP

A warm-up is composed of stretches and light cardiovascular exercises designed to:

- stretch the muscles:
- gradually increase respiratory action and heart rate;
- expand the muscles' capillaries to accommodate the increase in blood circulation which occurs during physical activity; and
- raise the muscle temperature to facilitate reactions in muscle tissue.

GUIDELINES FOR STRETCHING

The following guidelines should be followed while stretching to prepare for physical activity and to help prevent injury:

- Stretch all major muscle groups, including the back, chest, legs, and shoulders.
- Never bounce while stretching.
- Hold each stretch for 10–30 seconds to let the muscles release fully.
- Repeat each stretch two to three times.
- When holding a stretch, support the limb at the joint.
- Static stretching, which is stretching a muscle and holding it in position without discomfort for 10– 30 seconds, is considered the safest method.
- Stretching helps to relax the muscles and improve flexibility, which is the range of motion in the joints.
- As a guide, allow 10 minutes to warm up for every hour of physical activity.



The stretches chosen should focus on the areas of the body that will be used the most during the activity.

ACTIVITY

OBJECTIVE

The objective of this warm-up activity is to stretch the muscles and perform light cardiovascular exercises to prepare the body for physical activity and to help prevent injuries.

RESOURCES

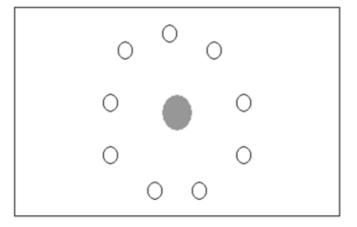
Nil.

ACTIVITY LAYOUT

Nil.

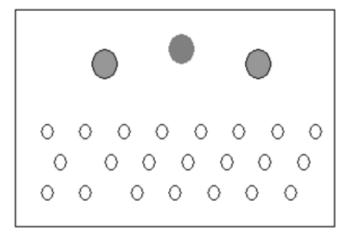
ACTIVITY INSTRUCTIONS

• Arrange the cadets in either a warm-up circle or in rows (as illustrated in Figures 2 and 3).



Note. Created by D Cdts 3, 2006, Ottawa, ON: Department of National Defence.

Figure 2 Instructor in the Centre of a Warm-Up Circle



Note. Created by D Cdts 3, 2006, Ottawa, ON: Department of National Defence.

Figure 3 Instructor at the Front with Two Assistant Instructors

- Demonstrate before having the cadets attempt each stretch / light cardiovascular exercise.
- Assistant instructors can help demonstrate the exercises and ensure the cadets are performing them correctly.
- Have cadets perform each stretch / light cardiovascular exercise.



Light cardiovascular activities should be done to warm up the muscles prior to stretching to avoid injury to or tearing of the muscles. For example, running on the spot for 30 seconds or performing jumping jacks should be performed prior to conducting the stretching activities located at EO C111.02 Attachment A.

SAFETY

- Ensure there are at least two arm lengths between the cadets so they can move freely.
- Ensure the cadets perform the stretches and light cardiovascular exercises in a safe manner, following the guidelines for stretching listed in this TP.

CONFIRMATION OF TEACHING POINT 3

The cadets' participation in the warm-up will serve as the confirmation of this TP.

Teaching Point 4

Conduct an activity where cadets will fire the cadet air rifle following physical activity.

Time: 5 min Method: Practical Activity

ACTIVITY

OBJECTIVE

The objective of this activity is to fire the cadet air rifle following physical activity.

RESOURCES

- Cadet air rifles (one per firing lane),
- Marksmanship mats (two per firing lane),
- BART and target frame (one per firing lane), and
- Safety glasses / goggles.



If resources are available the number of firing lanes may be increased.

ACTIVITY LAYOUT

Construct a range IAW A-CR-CCP-177/PT-001 Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual.

ACTIVITY INSTRUCTIONS

- 1. The cadets' heart rate should be elevated from participating in the warm-up activity in TP 3.
- 2. Have the cadets approach the firing point and prepare to fire using the techniques outlined in TP 1.
- 3. Have the cadets adopt the prone position and simulate firing at the BART.
- 4. Repeat steps one to three for each relay until all cadets have participated.

SAFETY

Range activities will be conducted IAW A-CR-CCP-177/PT-001 Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual.

CONFIRMATION OF TEACHING POINT 4

The cadets' participation in the activity will serve as the confirmation of this TP.

Teaching Point 5

Conduct a cool-down session composed of light cardiovascular exercises.

Time: 5 min Method: Practical Activity



The following information will be explained to the cadets during the cool-down activity.

PURPOSE OF A COOL-DOWN

A cool-down is composed of stretches and light cardiovascular exercises designed to:

- allow the body time to slowly recover from physical activity and to help prevent injury;
- prepare the respiratory system to return to its normal state; and
- stretch the muscles to help relax and restore them to their resting length.



The stretches chosen should focus on the areas of the body that were used the most during the activity.

ACTIVITY

OBJECTIVE

The objective of the cool-down is to stretch the muscles and perform light cardiovascular exercises that allow the body time to recover from physical activity, and to prevent injury.

RESOURCES

Nil.

ACTIVITY LAYOUT

Nil.

ACTIVITY INSTRUCTIONS

- Arrange the cadets in either a warm-up circle or in rows (as illustrated in Figures 2 and 3 of TP 3).
- Demonstrate before having the cadets attempt each stretch / light cardiovascular exercise.
- Assistant instructors can help demonstrate the movements and ensure the cadets are performing them correctly.
- Have cadets perform each stretch / light cardiovascular exercise.

SAFETY

- Ensure there are at least two arm lengths between the cadets so they can move freely.
- Ensure the cadets perform the stretches and light cardiovascular exercises in a safe manner, following the guidelines for stretching listed in TP 3.

CONFIRMATION OF TEACHING POINT 5

The cadets' participation in the cool-down will serve as the confirmation of this TP.

END OF LESSON CONFIRMATION

The cadets' participation in the activity in TP 4 will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK / READING / PRACTICE

Nil.

METHOD OF EVALUATION

Nil.

CLOSING STATEMENT

Being able to use techniques, such as visualization, to slow down the heart rate will be useful when participating in summer biathlon activities.

INSTRUCTOR NOTES / REMARKS

Cadets must have completed PO 106 (Fire the Cadet Air Rifle) prior to participating in this lesson.

REFERENCES

A0-027 A-CR-CCP-177/PT-001 D Cdts 3. (2001). *Cadet marksmanship program: Reference manual.* Ottawa, ON: Department of National Defence.

C0-002 ISBN 0-88962-630-8 LeBlanc, J. & Dickson, L. (1997). Straight talk about children and sport: Advice for parents, coaches, and teachers. Oakville, ON and Buffalo, NY: Mosaic Press.

C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved October 26, 2006, from http://www.marthajefferson.org/warmup.php

C0-058 Webb Physiotherapists Inc. (n.d.). *Running exercises*. Retrieved October 26, 2006, from http://www.physionline.co.za/conditions/article.asp?id=46

C0-059 Webb Physiotherapists Inc. (n.d.). *Exercise programme for squash, tennis, softball, handball*. Retrieved October 25, 2006, from http://www.physionline.co.za/conditions/article.asp?id=49

C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved October 25, 2006, from http://www.2protect.com/work3b.htm

C0-061 City of Saskatoon, Community Services Department. (2006). Stretch your limits: A smart guide to stretching for fitness. Retrieved October 26, 2006, from http://www.in-motion.ca/walkingworkout/plan/flexibility/

C0-089 ISBN 0-936070-22-6 Anderson, B. (2000). *Stretching: 20th anniversary* (Rev. ed.). Bolinas, CA: Shelter Publications, Inc.

C0-150 ISBN 0-88011-463-0 Nideffer, R. PhD. (1992). *Psyched to win: How to master mental skills to improve your physical performance*. Champaign, IL: Leisure Press.

C0-151 Devin Manufacturing Incorporated. (2005). *Biathlon style airgun target*. Retrieved February 15, 2007 from http://www.devinmfg.com/targets1.html

C0-154 Hansen, B. (1999). *Moving on the spot: Fun and physical activity: A collection of 5 minute stretch and movement sessions*. Retrieved October 26, 2006, from http://lin.ca/resource/html/dn3.htm#l1

THIS PAGE INTENTIONALLY LEFT BLANK



COMMON TRAINING GREEN STAR INSTRUCTIONAL GUIDE



SECTION 4

EO C111.04 - PARTICIPATE IN A RECREATIONAL SUMMER BIATHLON ACTIVITY

Total Time: 180 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.

Ensure that all members involved in conducting this activity are well versed in the competition guidelines located at Attachment A.

Photocopy EO C111.02 Attachment A for TPs 3 and 5.

Photocopy Attachment B as required.

Ensure a first aid station is set up.

Set up a running route of 250–500 m on level terrain and a range IAW A-CR-CCP-177/PT-001 Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual.

PRE-LESSON ASSIGNMENT

Nil.

APPROACH

An experiential approach was chosen for this lesson as it allows the cadets to acquire new knowledge and skills through a direct experience. The cadets experience summer biathlon and define that experience on a personal level. The cadets will be given the opportunity to reflect on and examine what they saw, felt and thought while participating in summer biathlon and consider how it relates to what they already learned and experienced as well as how it will relate to future experiences.

INTRODUCTION

REVIEW

Nil.

OBJECTIVES

By the end of this lesson the cadet shall have participated in a recreational summer biathlon activity.

IMPORTANCE

It is important for cadets to participate in a recreational summer biathlon activity because it requires personal discipline, develops marksmanship skills, and promotes physical fitness.

Teaching Point 1

Conduct the activity briefing.

Time: 30 min Method: Interactive Lecture



Based on the facilities, the cadet should be made aware of the start area, the course, the firing range, and the finish area.

COURSE LAYOUT

Each cadet will:

- run a loop of 250–500 m;
- fire five to eight pellets in an effort to activate all five targets on the (BART);
- run a loop of 250–500 m;
- fire five to eight pellets in an effort to activate all five targets on the BART;
- run a loop of 250–500 m; and
- finish the race.



The 250–500 m course should be clearly marked prior to the start of this lesson.

RULES AND REGULATIONS

Rules and regulations for the recreational summer biathlon activity include the following:

- Cadets must use the same firing lane for the duration of the activity.
- The run must be completed in the proper sequence and on the marked route.
- Rifles must be placed at the firing point by the range staff and will remain there for the duration of the activity.
- All firing will be done in the prone position.
- The rifle must be made safe upon completion of firing.
- An inoperable rifle will be replaced by the range staff, the target will be reset, and the cadet will fire five to eight shots with the new rifle.
- Safety infractions will result in time penalties.
- Missed targets will result in time penalties.

SCORING

The scoring of this biathlon activity will be based on time and penalties.

PENALTIES

Penalties will be added to the individual's time, to include:

- Each violation of the principles of fair play or good sportsmanship will result in a one-minute penalty, to include:
 - not giving way in an area of congestion;
 - pushing or shoving;
 - using profanity; and
 - interfering with other competitors.
- Each missed target will result in a one-minute penalty.
- Each safety infraction on the firing point will result in a one-minute penalty to include:
 - not keeping control of the cadet air rifle;
 - moving forward of the firing point; and
 - intentionally firing rounds at objects other than the BART.

OUT OF BOUNDS AREAS

Make cadets aware of all out of bounds areas and safety considerations depending on the training area.

CONFIRMATION OF TEACHING POINT 1

QUESTIONS:

- Q1. What are two rules / regulations for this biathlon activity?
- Q2. How will the recreational summer biathlon activity be scored?
- Q3. What is one very minor violation of the principles of fair play / good sportsmanship?

ANTICIPATED ANSWERS

- A1. Rules and regulations for the recreational summer biathlon activity include the following:
 - Cadets must use the same firing lane for the duration of the activity.
 - The run must be completed in the proper sequence and on the marked route.
 - Rifles must be placed at the firing point by the range staff and will remain there for the duration
 of the activity.
 - All firing will be done in the prone position.
 - The cadet air rifle sling is the only firing aid that may be used.
 - The rifle must be made safe upon completion of firing.
 - An inoperable rifle will be replaced by the range staff, the target will be reset, and the cadet will fire five to eight shots with the new rifle.
 - Safety infractions will result in time penalties.
 - Missed targets will result in time penalties.
- A2. The activity will be scored based on time and penalties.

A3. A very minor violation of the principles of fair play / good sportsmanship include:

- not giving way in an area of congestion;
- pushing or shoving;
- using profanity; and
- interfering with other competitors.

Teaching Point 2

Conduct a warm-up session composed of light cardiovascular exercises.

Time: 10 min Method: Practical Activity



The following information will be explained to the cadets during the warm-up activity.

PURPOSE OF A WARM-UP

A warm-up is composed of stretches and light cardiovascular exercises designed to:

- stretch the muscles;
- gradually increase respiratory action and heart rate;
- expand the muscles' capillaries to accommodate the increase in blood circulation which occurs during physical activity; and
- raise the muscle temperature to facilitate reactions in muscle tissue.

GUIDELINES FOR STRETCHING

The following guidelines should be followed while stretching to prepare for physical activity and to help prevent injury:

- Stretch all major muscle groups, including the back, chest, legs, and shoulders.
- Never bounce while stretching.
- Hold each stretch for 10–30 seconds to let the muscles release fully.
- Repeat each stretch two to three times.
- When holding a stretch, support the limb at the joint.
- Static stretching, which is stretching a muscle and holding it in position without discomfort for 10–30 seconds, is considered the safest method.
- Stretching helps to relax the muscles and improve flexibility, which is the range of motion in the joints.
- As a guide, allow 10 minutes to warm up for every hour of physical activity.



The stretches chosen should focus on the areas of the body that will be used the most during the activity.

ACTIVITY

OBJECTIVE

The objective of this warm-up activity is to stretch the muscles and perform light cardiovascular exercises to prepare the body for physical activity and to help prevent injuries.

RESOURCES

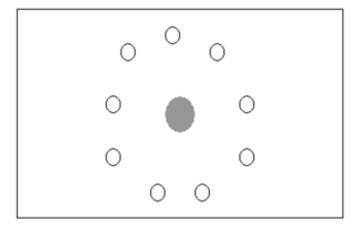
Nil.

ACTIVITY LAYOUT

Nil.

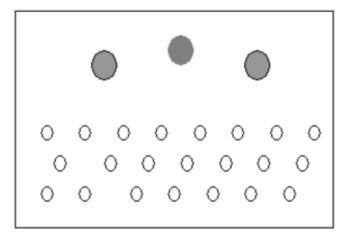
ACTIVITY INSTRUCTIONS

• Arrange the cadets in either a warm-up circle or in rows (as illustrated in Figures 1 and 2).



Note. Created by D Cdts 3, 2006, Ottawa, ON: Department of National Defence.

Figure 1 Instructor in the Centre of a Warm-Up Circle



Note. Created by D Cdts 3, 2006, Ottawa, ON: Department of National Defence.

Figure 2 Instructor at the Front with Two Assistant Instructors

- Demonstrate before having the cadets attempt each stretch / light cardiovascular exercise.
- Assistant instructors can help demonstrate the exercises and ensure the cadets are performing them correctly.
- Have cadets perform each stretch / light cardiovascular exercise.



Light cardiovascular activities should be done to warm up the muscles prior to stretching to avoid injury to or tearing of the muscles. For example, running on the spot for 30 seconds or performing jumping jacks should be performed prior to conducting the stretching activities located at EO C111.03 Attachment A.

SAFETY

- Ensure there are at least two arm lengths between the cadets so they can move freely.
- Ensure the cadets perform the stretches and light cardiovascular exercises in a safe manner, following the guidelines for stretching listed in this TP.

CONFIRMATION OF TEACHING POINT 2

The cadets' participation in the activity will serve as the confirmation of this TP.

Teaching Point 3

Conduct a recreational summer biathlon activity.

Time: 100 min Method: Practical Activity

ACTIVITY

OBJECTIVE

The objective of this activity is for cadets to participate in a recreational summer biathlon activity.

RESOURCES

Based on 20 cadets per group, the following resources are required per event:

- Cadet air rifles (5),
- Marksmanship mats (10),
- .177 air rifle pellets (a minimum of 700 pellets),
- Stop watches (5),
- BART and target frame (5),
- Safety glasses / goggles (8),
- Pens / pencils,
- Notice board,
- Biathlon score sheets located at Attachment B,
- Course control sheets located at Attachment B, and
- Range recording sheets located at Attachment B.

ACTIVITY LAYOUT

- Set up a running route of approximately 250–500 m on level terrain.
- Set up an air rifle range IAW Attachment A.
- Set up targets and target frames.
- Place two mats per firing lane.
- Place a cadet air rifle at each firing point.
- Place a pair of safety glasses / goggles at each firing point.

ACTIVITY INSTRUCTIONS

Activity instructions are located at Attachment A.

SAFETY

- Ensure all range safety procedures are followed.
- Ensure cadets drink plenty of water and apply sunscreen.
- Ensure the running route is clearly marked and crossing points are monitored anywhere a road may be crossed.
- Ensure a first aider is identified at the start of the activity and is available at all times.
- Ensure water is available for the cadets during and after the activity.

CONFIRMATION OF TEACHING POINT 3

The cadets' participation in the activity will serve as the confirmation of this TP.

Teaching Point 4

Conduct a cool-down session composed of light cardiovascular exercises.

Time: 10 min Method: Practical Activity



The following information will be explained to the cadets during the cool-down activity.

PURPOSE OF A COOL-DOWN

A cool-down is composed of stretches and light cardiovascular exercises designed to:

- allow the body time to slowly recover from physical activity and to help prevent injury;
- prepare the respiratory system to return to its normal state; and
- stretch the muscles to help relax and restore them to their resting length.



The stretches chosen should focus on the areas of the body that were used the most during the activity.

ACTIVITY

OBJECTIVE

The objective of the cool-down is to stretch the muscles and perform light cardiovascular exercises that allow the body time to recover from physical activity, and to prevent injury.

RESOURCES

Area large enough for all cadets to conduct a cool-down activity.

ACTIVITY LAYOUT

Nil.

ACTIVITY INSTRUCTIONS

- Arrange the cadets in either a cool-down circle or in rows (as illustrated in Fig. 1 and 2 of TP 2).
- Demonstrate before having the cadets attempt each stretch / light cardiovascular exercise.
- Assistant instructors can help demonstrate the movements and ensure the cadets are performing them correctly.
- Have cadets perform each stretch / light cardiovascular exercise.



Sample stretches are located at EO C111.02 (Run Wind Sprints) Attachment A.

SAFETY

- Ensure there are at least two arm lengths between the cadets so they can move freely.
- Ensure the cadets perform the stretches and light cardiovascular exercises in a safe manner following the guidelines for stretching listed in TP 2.

CONFIRMATION OF TEACHING POINT 4

The cadets' participation in the activity will serve as the confirmation of this TP.

Teaching Point 5 Conduct a debriefing.

Time: 10 min Method: Group Discussion



The point of the group discussion is to allow the cadets to share what they have learned from their experience.



TIPS FOR ANSWERING / FACILITATING DISCUSSION:

- Establish ground rules for discussion, eg, everyone should listen respectfully; don't interrupt; only one person speaks at a time; no one's ideas should be made fun of; you can disagree with ideas but not with the person; try to understand others as much as you hope they understand you; etc.
- Sit the group in a circle, making sure all cadets can be seen by everyone else.
- Ask questions that will provoke thought; in other words avoid questions with yes or no answers.
- Manage time by ensuring the cadets stay on topic.
- Listen and respond in a way that indicates you have heard and understood the cadet. This can be done by paraphrasing their ideas.
- Give the cadets time to respond to your questions.
- Ensure every cadet has an opportunity to participate. One option is to go around the group and have each cadet answer the question with a short answer. Cadets must also have the option to pass if they wish.
- Additional guestions should be prepared ahead of time.

SUGGESTED QUESTIONS:

- Q1. What did you enjoy the most about the activity?
- Q2. What challenges did you encounted while participating in the activity?
- Q3. What have you learned about yourself by participating in the activity? About your marksmanship skills? About your physical fitness ability?

CONFIRMATION OF TEACHING POINT 5

The cadets' participation in the activity will serve as the confirmation of this TP.

END OF LESSON CONFIRMATION

The cadets' participation in a recreational summer biathlon activity will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK / READING / PRACTICE

Nil.

METHOD OF EVALUATION

Nil.

CLOSING STATEMENT

Recreational summer biathlon is an activity that requires personal discipline, develops marksmanship skills, and promotes physical fitness. Competitive biathlon opportunities are available at the local, regional, and national level.

INSTRUCTOR NOTES / REMARKS

Results should be posted for cadets to review. PO 111 is a complementary training activity. It is designed to provide an opportunity for the cadets to participate in a recreational summer biathlon activity.

EO C111.01 (Participate in a Biathlon Briefing), EO C111.02 (Run Wind Sprints), EO C111.03 (Simulate Firing the Cadet Air Rifle Following Physical Activity) shall be taught prior to instructing this lesson.

The start and finish should be located in the same area, close to the firing point

REFERENCES

A0-027 A-CR-CCP-177/PT-001 D Cdts 3. (2001). *Canadian cadet movement*: cadet *marksmanship program reference manual*. Ottawa, ON: Department of National Defence.

A0-032 Cadets Canada. (2002). *Biathlon competition rules and IBU / cadet disciplinary rules*. Ottawa, ON: Department of National Defence.

A0-036 Cadets Canada. (n.d.). Canadian cadet movement: Biathlon championship series. Ottawa, ON: Department of National Defence.

C0-002 ISBN 0-88962-630-8 LeBlanc, J. & Dickson, L. (1997). Straight talk about children and sport: Advice for parents, coaches, and teachers. Oakville, ON and Buffalo, NY: Mosaic Press.

C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved October 26, 2006, from http://www.marthajefferson.org/warmup.php

C0-058 Webb Physiotherapists Inc. (n.d.). *Running exercises*. Retrieved October 26, 2006, from http://www.physionline.co.za/conditions/article.asp?id=46

C0-059 Webb Physiotherapists Inc. (n.d.). *Exercise programme for squash, tennis, softball, handball*. Retrieved October 25, 2006, from http://www.physionline.co.za/conditions/article.asp?id=49

C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved October 25, 2006, from http://www.2protect.com/work3b.htm

C0-061 City of Saskatoon, Community Services Department. (2006). Stretch your limits: A smart guide to stretching for fitness. Retrieved October 26, 2006, from http://www.in-motion.ca/walkingworkout/plan/flexibility/

C0-089 ISBN 0-936070-22-6 Anderson, B. (2000). *Stretching: 20th anniversary* (Rev. ed.). Bolinas, CA: Shelter Publications, Inc.

C0-154 Hansen, B. (1999). *Moving on the spot: Fun and physical activity: A collection of 5 minute stretch and movement sessions*. Retrieved October 26, 2006, from http://lin.ca/resource/html/dn3.htm#l1

GUIDELINES TO CONDUCT A RECREATIONAL SUMMER BIATHLON ACTIVITY

OBJECTIVES

The objectives of the recreational summer biathlon activity are:

- to practice and improve marksmanship skills;
- to improve the level of physical fitness; and
- to introduce cadets to the sport of summer biathlon.

COMPOSITION

Each Green Star cadet will enter as an individual.

FACILITIES

The facilities required to conduct a recreational summer biathlon activity are:

- a route, on level terrain, of approximately 250–500 m with the start and finish lines located close to the
 range. The route should be wide enough to accommodate a maximum of 10 cadets running at one time.
 When roads are to be crossed, they must be clearly marked and a central crossing point established with
 traffic control provided, and
- an air rifle range constructed IAW Part 1, Section 8 of A-CR-CCP-177/PT-001, with a minimum of one firing lane per cadet per group.

STAFFING

Numerous staff are required to conduct a recreational summer biathlon activity. These appointments may be filled by corps staff, and shall include:

- **Technical Delegate (TD).** Responsible for the overall conduct of the competition, including issuing penalties, and interpreting the rules.
- Range Safety Officer (RSO). Responsible for the overall conduct of the activities on the range.
- **Assistant RSO.** Responsible for targets, issuing ammunition, and assisting the RSO, as required.
- Lane Scorekeeper. Responsible for scoring targets and recording results on the range recording sheet (located at Attachment B).
- **Chief of Statistics.**Responsible for compiling all the event data (eg, range results, start / finish time, and any penalties assessed).
- Runner.Responsible for collecting the scoring sheets and delivering them to the chief of statistics.
- Start and Finish Line Chief. Responsible for starting the run and recording the finish times on the score sheet (located at Attachment B).
- **Course Control.** Responsible for recording each time the cadet runs a loop on the course control sheet (located at Attachment B).
- First Aider. Responsible for dealing with any injuries that may occur during the competition.

A-CR-CCP-701/PF-001 Attachment A to EO C111.04 Instructional Guide

FORMAT

Team Captain's Meeting

All cadets will attend the team captain's meeting. This meeting includes all the essential information required by the cadets to participate in the recreational summer biathlon activity. The cadets are given:

- start times.
- range lane assignments,
- weather updates, and
- introductions of the competition staff.

The Running Loop

Each cadet will run three separate loops of 250-500 m. Each running loop will consist of:

- assembling for an individual start (cadets will begin at 10-second intervals for the first loop); and
- crossing the finish line.

The Range

Each cadet will fire five to eight pellets in an effort to activate all five targets on the BART. After each bout of firing, the appropriate lane scorer will record the cadet's results and reset the BART.

SEQUENCE

This recreational summer biathlon activity will be conducted in the following sequence:

- 1. running a loop of 250–500 m;
- 2. firing five to eight pellets at the BART;
- running a loop of 250–500 m;
- firing five to eight pellets at the BART;
- 5. running a third loop of 250–500 m; and
- 6. crossing the finish line.

EQUIPMENT

Based on 20 cadets per group, the equipment required to conduct the recreational summer biathlon activity shall include, but is not limited to the following:

- Cadet air rifles (5),
- Marksmanship mats (10),
- .177 air rifle pellets (a minimum of 700 pellets),
- Stop watches (5),
- BART and target frame (5),
- Safety glasses / goggles (8),
- Pens / pencils,
- Notice board,

- Biathlon score sheets located at Attachment B,
- Course control sheets located at Attachment B. and
- Range recording sheets located at Attachment B.

DRESS

Appropriate clothing according to the weather forecast.

RULES AND REGULATIONS

- Cadets must use the same firing lane for the duration of the activity.
- The run must be completed in the proper sequence and on the marked route.
- Rifles must be placed on the firing point by the range staff and will remain there for the duration of the activity.
- All firing will be done in the prone position.
- The rifle must be made safe upon completion of firing.
- An inoperable rifle will be replaced by the range staff, the target will be reset, and the cadet will fire five to eight shots with the new rifle.
- Safety infractions will result in time penalties.
- Missed targets will result in time penalties.

SCORING

Scoring will be completed as follows:

- **Time.** The cadet's final time is the time from the start to finish, plus any issued penalties.
- **Firing.** For each bout of firing, the number of missed targets will be recorded on the range recording sheet by the lane scorekeeper (located at Attachment B). For each missed target, a one-minute penalty will be added to the cadet's total time.

PENALTIES

Penalties will be added to the individual's time, to include:

- Each violation of the principles of fair play or good sportsmanship will result in a one-minute penalty, to include:
 - not giving way in an area of congestion;
 - pushing or shoving;
 - using profanity; and
 - interfering with other competitors.
- Each missed target will result in a one-minute penalty.
- A one-minute penalty will be issued for each safety infraction, to include:
 - not keeping control of the cadet air rifle;
 - moving forward of the firing point; and
 - intentionally firing rounds at objects other than the BART.

A-CR-CCP-701/PF-001 Attachment A to EO C111.04 Instructional Guide

OUT OF BOUNDS AREA

Out of bounds areas are ti clearly identified prior to the start of the recreational summer biathlon activity.

NOTES

- Course control staff will record each time a cadet runs through a loop. See course control sheet located at Attachment B.
- The start and finish line chief will keep records for each cadet. When the sheet is full or nearly full the runner will take the sheet to the chief of statistics. See score sheet located at Attachment B.
- Bibs may be used to identify cadets, if available.

COURSE CONTROL SHEET

Cadet Name	Loop 1 Verification	Loop 2 Verification	Loop 3 Verification

Note. Created by D Cdts 3, 2006, Ottawa, ON: Department of National Defence.

Figure B-1 Course Control Sheet

SCORE SHEET

Cadet Name	Start Time	Loop One	Loop Two	Loop Three	End Time	Run / Safety Penalties	Firing Penalties	Total Time

NOTE:

The start and finish line chief is responsible for recording the run times and presenting the score sheet(s) to the scorekeeper.

RANGE RECORDING SHEET

Scorekeeper's Name:									
Cadet Name:	Lane	Shots Fired	X = 1	Miss				Misses	Comments / Penalties
		3 Spare	\neg	0	0	0	0		
Cadet Name:	Lane	Shots Fired	X = 1	Miss				Misses	
		3 Spare	\neg	0	0	0	0		
Cadet Name:	Lane	Shots Fired	X = 1	Miss				Misses	
		3 Spare	\neg	0	0	0	0		
Cadet Name:			X = I	X = Miss				Misses	
		3 Spare	$\neg \circ$	0	0	0	0		
Cadet Name:	Lane	Shots Fired	X = 1	Miss				Misses	
		3 Spare	0	0	0	0	0		
Cadet Name:	Lane	Shots Fired	X = I	Miss				Misses	
		3 Spare	-0	0	0	0	0		
Cadet Name:	Lane	Shots Fired	X = 1	Miss				Misses	
		3 Spare	-0	0	0	0	0		
Cadet Name:	Lane			X = Miss				Misses	
		3 Spare	\neg	0	0	0	0		
Cadet Name:	Lane	Shots Fired	X = 1	Miss				Misses	
		3 Spare	0	0	0	0	0		

Cadet Name:

Lane Shots Fired

3 Spare

X = Miss

0

Misses

0 0 0

A-CR-CCP-701/PF-001 Attachment B to EO C111.04 Instructional Guide

THIS PAGE INTENTIONALLY LEFT BLANK