



**DESIGNING AND MAINTAINING
CLOSED COURSES IN
NOVA SCOTIA**



Table of Contents

INTRODUCTION.....	3
A. WHAT IS A CLOSED COURSE?.....	4
B. CLOSED COURSE FACILITY REQUIREMENTS.....	4
C. REQUIREMENTS OF THE USERS OF A CLOSED COURSE.....	5
D. KEEPING CLOSED COURSES SAFE.....	6
E. ENVIRONMENT AND NOISE CONTROL.....	7
F. CLOSED COURSE CATEGORIES.....	8
a. CATEGORY “A” CLOSED COURSE.....	8
b. CATEGORY “B” CLOSED COURSE.....	9
i. Green Trail System.....	10
ii. Blue Trail System.....	11
iii. Black Diamond Trail System.....	12
iv. Physical Design Characteristics.....	12
1. Table 1.....	13
G. CLOSED COURSE ACCREDITATION PROCESS.....	14
APPENDIX A: On-site First Aid Equipment.....	15
APPENDIX B: Rules of Operation on Closed Courses.....	16
APPENDIX C: Application for Accreditation.....	18

INTRODUCTION

In December 2005 the Province of Nova Scotia introduced new laws regarding the operation of Off-highway Vehicles (OHVs). One of many notable changes includes the development of closed courses to ensure youth who operate OHVs are doing so in a safe and controlled environment. The purpose of this document is to assist interested organizations in designing and maintaining closed courses in Nova Scotia.

Closed courses will appeal to youth and adults alike who ride one or all forms of OHVs. There is a particular need, however, for organizations to offer trails for All-terrain Vehicle (ATV) riders aged 6 to 13 in a closed course setting as this is the only place they can ride in the province. While ATV riders aged 14 to 15, and youth who ride other forms of OHVs have alternative riding options, they will also be encouraged to ride on closed courses where greater safety measures are in place.

Closed courses are not ATV parks. While many similarities exist, one key distinguishing feature is that access to a closed course is limited by motor vehicles registered pursuant to the *Motor Vehicle Act*. This creates a more controlled environment. Closed courses may also be offered to any form of OHV, not just ATVs.

Finally, it should be noted that organizations must be accredited by the Province of Nova Scotia to operate closed courses. Technically, accreditation is only required if the trails will be open to ATV riders aged 6 to 15. When not operating as a closed course the following guidelines do not apply. In any case, operators should understand all components of the *Off-highway Vehicles Act* before inviting OHV riders to their trails.

For more information on closed courses and the accreditation process please contact:

Off-highway Vehicle Consultant

Tel: (902) 890-3777

Email: doug.oliver@gov.ns.ca

A. WHAT IS A CLOSED COURSE?

A closed course is officially defined as an area of land being used for an organized OHV event during which access to the area by motor vehicles is limited. In practical terms, a closed course is a facility which is designed and managed to provide a safe, controlled environment where trained OHV users 6 years of age and older can ride OHVs. There are two general categories of closed courses. Category A accommodates competitive riding. Category B accommodates family-oriented recreational riding.

As per the *Off-highway Vehicles Act*, organizations wishing to operate a closed course must be accredited by the Minister of Natural Resources. The following guidelines will be used to accredit closed course operators in Nova Scotia. All requirements are considered mandatory unless indicated otherwise.

B. CLOSED COURSE FACILITY REQUIREMENTS

- Access to the closed course must be limited by motor vehicles. Access should also be limited for non-motorized users.
- Entry to a closed course must only be via a controlled access point. All other potential entry points must be gated or managed in such a way as to limit access by other motor vehicles.
- Closed courses must not cross or intersect with public roads or rights-of-way.
- Operators must have written permission from the landowner/occupier permitting OHV use on the property.
- Course design must be in keeping with the guidelines outlined in this document for particular classes of OHVs and difficulty ratings.
- Course designers must refer to *Developing Recreational Trails in Nova Scotia* as a resource on such topics as construction and appropriate signage placement. An additional section on OHVs will be added in the near future. This resource can be found at www.novascotiatrails.com or by contacting the DHPP.
- The operators of a closed course must have a 3rd party liability insurance policy with minimum coverage of \$5,000,000 per incident.
- The design and layout of trails must meet the requirements of the *Environment Act*, the *OHV Act*, and all other applicable municipal, provincial or federal by-laws, legislation or regulations.
- A trained official must be present during hours of operation. A trained official is defined as a person who has reached the age of majority and who has been certified under the *Off-highway Vehicles Safety and Training Regulations* to operate an OHV of the same class as that being used on the closed course at which the person officiates.
- A first responder must be present during hours of operation. A first responder is defined as a person who has successfully completed at least the Medical First Responder course delivered by St. John Ambulance or the First Responder course delivered by the Canadian Red Cross, or can demonstrate to the Minister's satisfaction that the person has obtained an equivalent certification. (see appendix A for list of required first aid equipment).

- A trail warden(s) should be onsite to help supervise the trails. Trail warden training is available through the ATV Association of Nova Scotia (ATVANS) or the Snowmobile Association of Nova Scotia (SANS).
- Numbers of officials, first responders and wardens present should be based on area of facility and number of users present.
- In addition to the above requirements, a closed course should include the following amenities (these are optional):



- public phone access;
- parking for vehicles and trailers;
- potable water;
- washroom facilities (can be non-flushing); and,
- if offering accommodations (e.g. cabins, campground) course operators must meet requirements of the *Tourist Accommodations Regulations* for roofed or camping establishments in Nova Scotia.

C. REQUIREMENTS OF THE USERS OF A CLOSED COURSE

- All OHVs on the course must be registered unless the vehicles are owned by the closed course operator and remain on their private land. If a closed course is accessing crown land or other private land, all machines must be registered.
- As per the schedule outlined in the *Off-highway Vehicles Safety and Training Regulations*, all users who should be trained must be trained before using the course.
- It is an offense to operate an OHV while under the influence of alcohol or drugs.
- Effective April 1, 2007 all machines must have 3rd party liability insurance coverage for an amount that will be provided in the regulations. An operator may decide to have 3rd party liability insurance as a prerequisite to use their closed course before April 1, 2007.
- No vehicle that has an exhaust system other than that provided by the manufacturer or equivalent standard if replaced will be allowed on a closed course.
- Approved helmets (DOT, CSA, SNELL, or BSI) must be worn at all times when riding.
- Additional protective equipment including eye protection, long pants, long sleeves, gloves and boots are required for riders aged 15 and under and are highly recommended for all OHV users. Chest, elbow, leg and other protective equipment is optional but may be deemed necessary by course operators.
- Passengers on OHVs are not recommended.



D. KEEPING CLOSED COURSES SAFE

- Course operators must have a Risk Management Plan (RMP) in place that identifies the risks associated with the facility and how they will be managed.
- Course operators must have an Emergency Response Plan (ERP) as part of the risk management process that addresses how emergencies such as fire, injury, illness, and collisions will be dealt with including estimated response times according to size and characteristics of the facility. Course staff and/or volunteers must be trained on the implementation of the ERP.
- Emergency personnel must have easy access to all areas of a closed course trails system and may need to travel against traffic during emergency response.
- The ERP must include an incident reporting process which tracks incidents and includes such information as the nature of the incident, incident response time, what action was taken as a result of the incident, and any action taken after the incident to ensure similar incidents do not occur in the future.
- The RMP and the ERP must include the ability to communicate internally and externally to emergency services.
- Course staff and/or volunteers using OHVs in the performance of their duties must be trained in the operation of the appropriate OHV and have no convictions for driving under the influence of alcohol, or drugs during the previous 5 years.
- Course staff and/or volunteers must have no convictions for a sexual offence, or violent crime against a minor.
- Criminal records check and driver's abstract will be required every five years.
- When youth aged 6 to 15 are operating OHVs on the closed course, the following conditions must be met:
 - youth must be trained and in sight of a trained parent or legal guardian (parent or legal guardian can also designate a trained official or other responsible adult 19 or over to supervise their child on their behalf);
 - no child under 6 years of age can drive on a closed course;
 - a first responder must be present with the appropriate equipment (see appendix A);



- a trained official must be present and accessible;
 - must have controlled entrance and exit points to the closed course and controlled one-way traffic patterns within the course;
 - children and youth must be on OHVs of an appropriate size, in accordance with the Act and regulations; and,
 - youth must wear the personal protective equipment listed previously.
- Course rules must be in effect, posted and enforced (e.g. speeds, direction of travel, etiquette, etc.). See Appendix B for rules of operation.
 - It is recommended that the course operators have persons with vehicle safety inspection capabilities on site to ensure that OHVs operating on a closed course are safe.

E. ENVIRONMENT AND NOISE CONTROL

- The proposed site must provide adequate buffering from adjacent land parcels. The active riding areas of the closed course must provide a minimum of 200 metre buffer areas from all adjacent properties unless written authorization is provided by the adjacent landowner.
- Trails must not cross sand dunes, coastal barrens, or highland barrens.
- Unauthorized operation of an OHV on a beach, wetland, or watercourse is illegal. Trails should be designed and constructed to avoid these areas. If this is not possible, authorization must be obtained from the Department of Natural Resources (for beach crossings) and Nova Scotia Environment (for wetland and watercourse crossings).
- Operators should ensure that proposed sites do not impact any vulnerable areas where OHV use is prohibited or restricted, archeological sites, special habitat areas, or nature reserves.
- Trails and facilities should be located as distant as possible from existing on-site and off-site noise sensitive areas.
- Noise indifferent uses (i.e. washrooms, maintenance buildings, parking lots, etc.) should be placed as buffers between the trails and facilities and noise sensitive areas.
- Trails should be constructed using surface materials and other treatments that minimize dust generation and soil erosion.



- Trails should be located in areas where topography, vegetation or constructed barriers will prevent prevailing winds from carrying generated dust onto adjacent lands.
- Excessive surface water runoff should be reduced by design means such as retention areas, runoff/erosion barriers, as well as permeable parking surfaces.

F. CLOSED COURSE CATEGORIES

In addition to specific facility and user requirements, safety, and environment and noise control measures, accredited operators must follow the additional requirements of Category A and/or B depending on which types of course(s) they choose to offer riders.

CATEGORY “A” CLOSED COURSE: Objective is to provide OHV users who wish to compete in OHV based sports with a safe, controlled environment designed specifically for a particular class of OHV.



- When operating as a closed course, operators must have their facility sanctioned by the Canadian Motosport Racing Club (CMRC) or the Canadian Motorcycle Association (CMA) to ensure proper design elements and safety measures are in place.
- Operators must refer to CMRC or CMA rulebooks for appropriate participant categories and who can safely share a course at the same time (e.g. participants divided by age and engine displacement).
- A training area designed as per Canada Safety Council guidelines could also be on site.

CATEGORY “B” CLOSED COURSE: Objective is to provide OHV users who wish to participate in family-oriented, non-competitive recreation with a facility where they can safely ride together on recreational trails designed and rated with varying skill levels in mind.

- The trail network within a category B closed course will be designed based upon the landscape of the site with minimal impact on the environment and adjacent landowners while balancing the safety and enjoyment of riders.
- The course should offer a variety of experiences, surroundings, vistas, contact with other users, technical riding, terrain, etc. This is particularly important for riders who have the skill, but lack the ability or desire to ride more difficult trails (e.g. parent supervising child, rider wanting a relaxing experience).
- The course should enable riders to travel at differing paces and comfort levels. To facilitate rider flow, trails may need pullover and passing sections to allow riders to safely leave main trail sections for the purpose of stopping or passing.
- Canada Safety Council training will provide the basic skills and knowledge required for new riders and youth aged 6 to 15 to successfully navigate a green level course (characteristics outlined below).
- In consultation with closed course trained officials, parents who believe that their children may be capable of graduating safely to a blue or black diamond level trail may allow their children to do so under their strict supervision.





Photo above:

More relaxed experience.
Learning opportunity for
the less experienced
rider.

Green Trail System:

Objective is to provide youth aged 6 to 15, their parents/guardians, and new or inexperienced riders with a safe and enjoyable learning experience.

All riders aged 6 to 15 will need to be accomplished green riders before progressing to blue or black diamond trails.

Operational Characteristics

- one-way traffic
- few intersections with other trails
- speeds up to 15 km/hr but may be less depending upon conditions
- passing at designated passing sections only
- first responder(s) positioned in close proximity to green system
- noise and dust should be kept to a minimum
- incorporate all signage elements for learning purposes



n from a
o the
trail system



Photo above:
Challenging but fun.



Blue Trail System:

Objective is to provide the accomplished green level rider with a safe but more challenging riding experience.

Operational Characteristics

- one-way traffic
- speeds up to 30 km/hr depending upon conditions
- passing at designated passing sections or when passed vehicle is stopped and to the extreme right side of trail
- accessible to youth aged 6 to 15 who have demonstrated the skill and decision making capabilities to navigate the green trail system successfully and safely
- can be stacked on green trails, however, riders must obey all green trail characteristics while on green trails

Photo left:

Manageable to the average rider.



Photo above:
Careful concentration
needed at all times.

Photo below:
Difficult but
rewarding to the skillful
rider.



Black Diamond Trail System:

Objective is to provide the accomplished blue or advanced rider with a safe challenging course.

Operational Characteristics

- one-way traffic
- speeds up to 30 km/hr depending upon conditions
- passing at designated passing sections or when passed vehicle is stopped and to the extreme right side of trail
- accessible to youth aged 6 to 15 who have demonstrated the skill and decision making capabilities to navigate the blue trail system successfully and safely
- can be stacked on green or blue trails, however, riders must obey all green trail characteristics while on green trails and all blue trail characteristics while on blue trails
- obstacles may or may not be avoidable therefore riders should be competent in their abilities

Physical Design Characteristics

The following physical characteristics must be used in the design and construction of a closed course trail network for ATVs (see Table 1). While operators have more flexibility with blue and black diamond trails, green trail specifications must be followed for full accreditation.

Additional guidelines are being discussed for off-highway motorcycles, snowmobiles and other OHVs. However in general:

- Off-highway motorcycles can manage shorter radius turns, narrower tread width, and a slightly narrower right-of-way.
- Snowmobiles generally require longer trails, longer radius turns, lower grades, a higher right-of-way (due to snow) and few to no obstacles.
- Adjustments may be needed for other OHV uses.

Table 1 – Physical Design Characteristics

	<i>Green - Required</i>	Blue - Suggested	Black Diamond - Suggested
Alignment	<ul style="list-style-type: none"> <input type="checkbox"/> Varied straight and curved sections <input type="checkbox"/> Large turns with min. curve radius 3.5 m 	<ul style="list-style-type: none"> <input type="checkbox"/> Sections of irregular surface <input type="checkbox"/> Sharper and climbing turns suitable 	<ul style="list-style-type: none"> <input type="checkbox"/> Rough sections with stretches of very rough, uneven terrain <input type="checkbox"/> Frequent sharp and climbing turns suitable
Grade	Max 15%	Max 25%	Max 35%
Cross Slope	Max 5% Note: Min 2% suggested for adequate drainage	Max 8%	Max 12%
Right-of-Way	Min Height 3 m (due to snow during winter use) Min Width 3 m	Min Height 3 m Min Width 3 m	Min Height 3 m Min Width 2 m
Tread Width	Min 2 m	Min 1.3 m	Min Vehicle Width
Tread Surface	<ul style="list-style-type: none"> <input type="checkbox"/> Smooth <input type="checkbox"/> No pavement <input type="checkbox"/> Avoid loose materials 	<ul style="list-style-type: none"> <input type="checkbox"/> Loose materials okay (e.g. sand, etc.) <input type="checkbox"/> No pavement 	<ul style="list-style-type: none"> <input type="checkbox"/> Long sections of sand and loose materials desirable <input type="checkbox"/> No pavement
Obstacles	<ul style="list-style-type: none"> <input type="checkbox"/> Roots/rocks not protruding over 7 cm <input type="checkbox"/> Holes no wider than 60 cm or deeper than 15 cm <input type="checkbox"/> No water bars or logs <input type="checkbox"/> Puddles up to 15 cm deep and 3 m long <p>Note: Obstacles must be navigable and not cause the OHV to be rocked from side to side. OHVs should have full contact with the ground at all times.</p> 	<ul style="list-style-type: none"> <input type="checkbox"/> Roots/rocks not protruding over 15 cm <input type="checkbox"/> Holes no wider than 1 m or deeper than 15 cm <input type="checkbox"/> A few logs up to 20 cm in diameter <input type="checkbox"/> Puddles up to 25 cm deep and 7.5 m long <input type="checkbox"/> Hills, bridges, corduroy, chicanes may be added 	<ul style="list-style-type: none"> <input type="checkbox"/> Roots/rocks may protrude over 15 cm on occasion <input type="checkbox"/> Rock ledges up to 30 cm desirable on occasion <input type="checkbox"/> Holes may be wider than 1 m or deeper than 15 cm <input type="checkbox"/> 1 to 5 logs up to 20 cm in diameter per 2.5 km of trail <input type="checkbox"/> Puddles over 25 cm deep and 7.5 m long may be present <input type="checkbox"/> Various other obstacles including mud holes may be present 

G. CLOSED COURSE ACCREDITATION PROCESS

Organizations interested in designing and maintaining a closed course must submit an Application for Accreditation to the Minister of the Natural Resources on the approved form found in Appendix C.

Government staff will follow up with a field visit and distribute to other relevant Agencies and Departments (eg. Health Promotion and Protection, Nova Scotia Environment, Education) as required.

For consideration by the Minister, Applications for Accreditation must be submitted in hard copy format to the attention of:

Contact:

Off-highway Vehicle Consultant
Department of Natural Resources
Tel: (902) 890-3777
Fax: (902) 662-2160
Email: doug.oliver@gov.ns.ca

Address:

Natural Resources
11881 Highway 2
Onslow, NS
B0M 1C0

**APPENDIX A:
Required First Responder On-site First Aid Equipment**

<u>Item</u>	<u>Estimated Cost</u> (in 2006)
Trauma Bag (e.g. A1200)	\$300 + 450 to fill bag
KED (traction splint)	\$250
Backboard	\$340
Head Blocks	\$140
Backboard Straps	\$ 25 x 9
Safety Vests	\$ 75
O ₂ Regulator (if trained for use)	\$150
O ₂ Wrench	\$ 8
BP Cuff	\$ 54-\$160
Stethoscope	\$ 25
Scissors	\$ 10
V-Vac Suction Starter Kit	\$120

For further information contact your authorized First Responder training provider.

APPENDIX B:

Rules of Operation on Closed Courses

One of the ways an OHV closed course can improve safety and reduce environmental and social impacts associated with OHV use is to manage the behavior of closed course users. The rules for a course must be clearly displayed at trailheads and entry points. The rules of use must include but are not limited to:

Required Rules:

- A. One-way traffic.
- B. Everyone must wear a DOT, CSA, SNELL, or BSI approved helmet.
- C. Additional protective equipment including eye protection, long pants, long sleeves, gloves and boots are required for riders aged 15 and under and are highly recommended for all OHV users. Chest, elbow, leg and other protective equipment is optional but may be deemed necessary by course operators.
- D. Carry proof of insurance (as of April 1, 2007) or as required by course operator before then.
- E. Carry proof of registration.
- F. Riders must yield to emergency vehicles.
- G. No one shall operate an OHV while under the influence of alcohol or drugs.
- H. Enter and exit the trail system at approved trailheads only.
- I. Cross watercourses at constructed crossings only.
- J. Stay on the trail. Do not enter a no trail, no entry, or gated area.
- K. Ride at a speed reasonable for the conditions and obey posted speed limits.
- L. OHVs must have a properly functioning muffler that meets the original equipment manufacturer's specifications and has a spark arrestor.
- M. Be aware of other riders. Yield the right of way to faster riders.
- N. Stop when signaled to by a closed course official or enforcement officer.
- O. Youth aged 6 to 15 may ride during daylight hours only.
- P. Lighted headlamps and tail lamps are required for OHV operation during darkness.
- Q. A person who has their motor vehicle license suspended or revoked may not operate any vehicle at any time.
- R. Hunting is not permitted.
- S. Riders must adhere to course hours of operation.

Recommended Rules to Consider:

- A. Passengers on OHVs are not recommended.
- B. Three-wheeled ATVs are not recommended.
- C. All vehicles may not exceed 10 km/h while in the parking areas.
- D. The Management reserves the right to refuse entrance to any person or eject any person who appears to be under the influence of alcohol or any substance.
- E. No smoking is allowed on the trails.
- F. No littering.
- G. If using a winch to extricate an OHV, you must wrap the tree with burlap or webbing to prevent damage to the tree.
- H. Trails are designed for beginner riders, intermediate riders and advanced riders. Do not ride above your ability. Work up slowly to the next level. Riders may be monitored by closed course staff.

APPENDIX C:
Application for Accreditation



Application for Accreditation

Natural Resources

Organization Name:		Date:	
Primary Contact:			
Position:			
Mailing Address:			
Municipality:		Postal Code:	
Telephone:	(W)	(H)	Fax:
E-Mail:			

Alternate Contact:			
Position:			
Mailing Address:			
Municipality:		Postal Code:	
Telephone:	(W)	(H)	Fax:
Email:			

Proposed Closed Course Name:			
Course Location:			
Website:			
Closed Course Type: (check all)	Category A: <input type="checkbox"/> ATVs	Size of Course:	Trails: _____ km

that apply)	<input type="checkbox"/> Off-highway Motorcycles <input type="checkbox"/> Snowmobiles <input type="checkbox"/> Other OHVs (list): <hr/> <hr/> <hr/> <hr/>	Property: _____ acres
	Category B: <input type="checkbox"/> ATVs <input type="checkbox"/> Off-highway Motorcycles <input type="checkbox"/> Snowmobiles <input type="checkbox"/> Other OHVs (list): <hr/> <hr/> <hr/> <hr/>	Size of Course: Trails: Green _____ km Blue _____ km Black Diamond _____ km Property: _____ acres

Other Information:

Additional Information Required (please check):

- drawing or map of the site with trails marked appropriately**
- designs of how special structures such as bridges, guardrails, etcetera will be constructed**
- overview of how applicant is dealing with environmental issues (e.g. special places, water) and safety issues (e.g. steep embankments)**
- proof of incorporation under the *Companies Act* or the *Societies Act***
- proof of land ownership or landowner permission**
- proof that appropriate permits are in place (e.g. navigable waters, environment)**
- proof of insurance**
- proof of sanctioning from CMRC or CMA if applying for Category A**
- copy of the Risk Management Plan**
- copy of the Emergency Response Plan**
- names of trail warden(s), first responder(s), trained official(s) and proof of certification**

Signature: _____
(Primary Contact)

Date: _____

Signature: _____
(President or Owner)

Date: _____