



RESPONSIBLE OUTDOOR RECREATIONAL PRACTICES AND ENVIRONMENTAL STEWARDSHIP

CADS INSTRUCTOR MANUAL INSERT

UP-DOWN-PRE RE-RE-RE

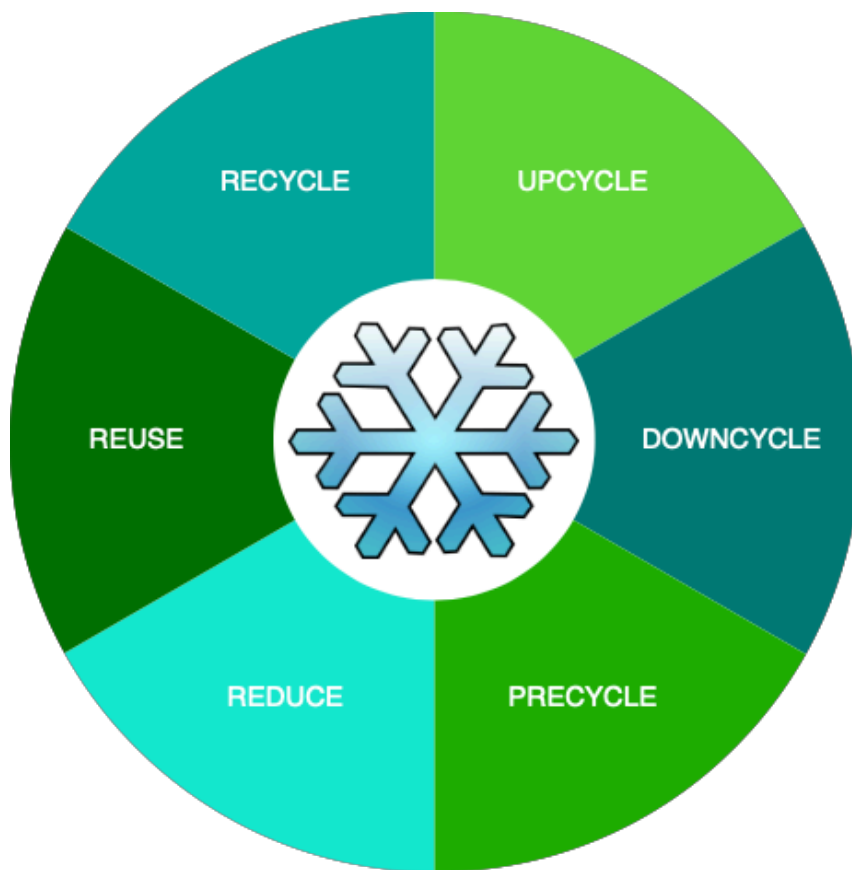


UP-DOWN-PRE-RE-RE-RE

Evidence suggests that human influences are contributing to snowpack loss. Warmer than normal temperatures create wetter snow conditions and retreating snow lines are likely to continue moving upward. Shorter seasons, earlier melts and shallower snowpacks are all likely to become more common. Less snowpack has a direct connection to lower streamflows which impacts water supplies and affects humans, wildlife and natural ecosystems. It is also problematic for ski resorts and those who like to ski or snowboard.

As people who love being in the mountains and enjoying Snowsports, we all have a responsibility to do what we can to help in the protection of our environment. We also have a responsibility to challenge ourselves to learn more about how our small efforts can help the movement that results in large changes for our planet. The next few pages introduce some simple concepts and ask some challenging questions that we can all apply to our very different and diverse recreation areas. There is an extensive list of resources available if you would like to continue your learning.

There are 6 principles that we are promoting within CADS to encourage everyone to do what they can to create a greener Snowsports culture.



UPCYCLING

Adaptation adds value.

Creating useful and usable products out of waste or unwanted items. Preferable to downcycling because it usually adds value to the original item instead of breaking it apart. Get creative, you're only limited by your imagination.

Examples: Make a coat hook, shelves, or a chair out of old skis or boards.

DOWNCYCLING

Breaks it apart and decreases its value

Breaking down an item into its component elements or materials, and converting them into new products. Downcycled products are often cheaper or weaker than the original product, and many cannot be converted into other useful products again in the future. Downcycling helps to reduce waste and improve the efficiency of resource usage.

Examples: Creating insulation from old pairs of jeans; Clothing is shredded for loud speaker cones or furniture padding.

PRECYCLING

Actions based on Awareness

Making ethical choices before we buy something based on how much waste or recycling material that product will generate. **Examples:** Buying in bulk; choosing products with less packaging; avoiding products that can't be recycled; planning ahead to bring your own reusable item; avoiding items you don't need; choosing a company that uses quality environmental practices.

REDUCING

Buy less, Use less

Avoiding the acquisition of unnecessary items (Do you really need a third pair of skis?). Avoiding being wasteful with resources and finding ways to use less (Do you need to shower before and after skiing?). This includes refusing unnecessary items that are automatically provided when purchasing another item. **Practice phrases like:** "No bag thanks"; "I don't need a napkin thank-you"; "Thanks but I brought my own fork/mug/container/cup".

REUSING

Keep using it and share it

Use items again and again or share items with friends or family. Have your own set of items that can be used in the place of single-use items (and bring them with you). Reusing helps to save time, money, energy and resources.

Examples: Donating your used outerwear to an organization like 'Clothes the Loop', who recycle outerwear; Or SWAG (Sharing Warmth around the globe) – who redistribute retired ski resort uniforms to those in need in cold weather countries around the world.

RECYCLING

Making the same or new products

Converting waste into reusable material. Because recycling rules are different in different places, it is important to be really familiar with the rules in your community and know what can and cannot be recycled, where to recycle it and how to recycle it. Not everything is recycled equally. Glass can be recycled again and again and still retain its original quality. Plastic and paper, however, can only be recycled a finite number of times. Don't forget recycling requires energy and water to process, so try to precycle, reduce or reuse first.

A typical lifecycle of paper, becoming a lower quality product each time, it is recycled:



What else can be done?

Challenge yourself

- Could you support companies with better environmental policies and practices?
- Did you know almost all fabrics (even the damaged pieces) can be recycled instead of thrown away?
- Could you bring your own reusable mug/bottle/container/straw/bag/cutlery?
- Could you choose products which are second-hand instead of new?
- Do you observe resort closures that may be there for the well-being of sensitive plants and animals?
- Have you considered using carbon offsets to lessen your impact when you fly?
- Could you carpool more often?
- Do you take your ski racks off your car when not in use for better fuel efficiency?
- Do you replace your snow tires as soon as the season ends to help them last longer?
- Could you educate yourself to learn more?

Challenge your Gear

- Are there PFC-free waxing products you could buy to tune your skis?
- Could you repurpose your old skis, boards, bindings, boots or poles?
- Did you know there are 18 'Clothes the Loop' licensed stores across Canada which will accept your used apparel and footwear?
- Could you support more local companies when buying gear?
- Did you know that wool is both renewable and biodegradable; stain and odor resistant; flame and UV resistant; as well as hypoallergenic and easily cleaned?
- Are there second-hand stores or ski swaps in your community that will take used gear?
- Could you choose to buy more durable high-quality products that last longer?
- Could you choose to buy products that contain recycled content?

Challenge your Resort

- Is there a staff bus at your resort? Are your students and instructors welcome to ride it? Are there incentives to use it?
- Does your resort use any types of alternative energy sources?
- Does your resort have anti-idling campaigns in place?
- Are there places to put used trail maps for future use?
- How does your resort monitor and conserve energy usage?
- What does your resort do to reduce their fuel usage?
- How does your resort reduce, reuse and recycle?
- What does your resort do to conserve water?
- What does your resort do to respect land and resources?
- Are there any environmental education and awareness programs at your resort?
- Is your resort part of the NSAA (National ski areas association) sustainable slopes program?

Challenge your Program

- Do you have recycling facilities at your adaptive program?
- Could you create more carpooling avenues for instructors and students?
- Could you provide reusable, washable cutlery, mugs, cups and plates for your instructors and participants to use?
- Do your instructors need printed manuals or could they use electronic versions?
- Are there other ways to reduce printed materials in your program?
- Is there a way for your program to share used gear with your students?
- Could you donate your used adaptive equipment to less established programs?
- Could you receive uncollected gear from lost and found?
- Could your program upcycle old skis, boards, bindings, boots or poles?



Thank you to MEC for providing funding to complete this project to provide education and awareness on responsible outdoor recreation practices and environmental stewardship.

WE CAN ALL DO 1% MORE AND THE WORLD WILL CHANGE!!



Resources

Below are some of the great resources we used. Check them out yourself to learn more.

The importance of Environmental Stewardship

- POW - Protect our Winters: <https://protectourwinters.ca>
- Movie: <https://www.amazon.com/Time-Choose-Oscar-Isaac/dp/B01LOUPR34>
- Movie 'The Little Things': <https://www.youtube.com/watch?v=iYLs7uiL8CQ>
- The pro-snow project: <https://www.climateRealityProject.org/pro-snow>
- The story of Stuff: <https://storyofstuff.org/>

Getting the facts on Climate Science

- Fighting climate change-Grist: <https://grist.org/>
- Understand the science: <https://www.skepticalscience.com/>
- NASA - Vital signs of the planet: <https://climate.nasa.gov/>
- National Geographic: <https://www.nationalgeographic.com/environment/climate-change/>
- Climate science & solutions: <https://protectourwinters.org/climate-science-and-solutions/>
- Environmental Education for Kids (EEK!): <http://eekwi.org/earth/recycle/rgloss.htm>
- David Suzuki Foundation: <https://davidsuzuki.org/our-work/climate-solutions/>

How climate change affects snow-pack

- <https://www.massaudubon.org/our-conservation-work/climate-change/effects-of-climate-change/on-weather/precipitation>
- <https://www3.epa.gov/climatechange/kids/impacts/signs/snowpack.html>
- <https://journals.ametsoc.org/doi/10.1175/JCLI-D-15-0632.1>
- <https://www.sciencedaily.com/releases/2017/04/170418114340.htm>

Ride-sharing and carbon offsets

- Create your own ride-sharing site: <https://www.groupcarpool.com/>
- Long distance ride sharing: <https://www.kangaride.com/>
- Offset big trips -: <https://www.less.ca/en-ca/>
- Explaining carbon offsets: <https://davidsuzuki.org/what-you-can-do/carbon-offsets/>

How ski resorts are responding to the threats of climate change:

- 8 green ski resorts (How ski resorts are responding) <https://news.nationalgeographic.com/news/energy/2011/12/pictures/111206-green-ski-resorts/>
- 100% on-site renewal energy: <https://www.curbed.com/2013/4/30/10248632/the-first-ski-area-with-100-onsite-renewable-energy>
- Conflicted Obsessions (Whistler Blackcomb) <https://youtu.be/tcxg8G2JAX0>
- Keep winter cool - <https://www.nrdc.org/media/2004/040219>
- National ski areas Association: www.nsaa.org
- Weather-proofing: <https://www.cbc.ca/news/business/ski-resorts-weather-proofing-climate-change-1.3715284>
- Efficient ski resorts Fin: https://mara.fi/site/attachments/energy_efficient_ski_resorts.pdf
- Snow-making: <https://www.sintef.no/en/latest-news/a-future-for-skiing-in-a-warmer-world/>
- Geothermal: <http://www.brushskiclub.com.au/information/geothermal-project/>
- Reducing the carbon-footprint: <https://www.deseretnews.com/article/700095545/More-ski-areas-trying-to-reduce-carbon-footprint.html>

- Green energy: <https://www.greenmatters.com/travel/2018/02/08/Z1sQ7j5/ski-resort>
- Environmental charter for ski areas: <http://www.solaripedia.com/files/353.pdf>
- Fighting climate change: <https://www.wired.com/story/ski-resorts-fight-climate-change-with-snow-blowers-and-buses/>

PFC-free (toxin-free) ski and board waxes

- Beaverwax: <https://www.beaverwax.com/>
- Purl: <https://purlwax.com/>
- Look no wax -Juice (wax alternative): <http://looknowax.wixsite.com/juice>
- Nzero wax: http://www.nzerowax.com/index.php?id_lang=1
- Butta <http://www.butta.co.uk/>

Information on the harmful effects of ski waxes

- <https://purlwax.com/pages/environment>
- www.scientificamerican.com/article/ski-wax-chemicals-buildup-blood/
- <https://www.treehugger.com/culture/your-ski-and-snowboard-wax-could-be-seriously-harmful-to-you-wildlife.html>

What to do with used outerwear and apparel

- Northface clothing recycling program: (What to do with used outerwear and apparel) <https://www.thenorthface.com/about-us/responsibility/product/clothes-the-loop.html>
- Burton Giving gear a second chance: <https://www.burton.com/blogs/the-burton-blog/burton-pass-along-giving-gear-second-chance>
- Patagonia Worn wear – gear repair program, and online used gear store: <https://www.thenorthface.com/about-us/responsibility/product/clothes-the-loop.html>
- SWAG-Sharing Warmth around the globe: <http://www.swagusa.org/home.asp>
- Creating renewed apparel from discards <https://renewalworkshop.com/pages/our-story>

How to be an eco-friendly skier or boarder

- Eco-friendly skier: <http://www.snorkelstosnow.com/how-to-be-an-eco-friendly-skier/>
- 10 ways to repurpose your ski gear: <https://blog.liftopia.com/10-ways-repurpose-ski-gear/>

Eco-friendly gear and brands

- Eco-gear: <https://www.thecultureist.com/2015/01/27/eco-friendly-skis-products/>
- Eco-friendly ski gear: <https://www.snowplaza.co.uk/blog/10965-eco-friendly-ski-gear/>
- Grown Skis, creator of hemp skis: <http://grownskis.com/>
- Soul Poles, made with bamboo: <https://www.soulpoles.com/>
- Pole Plant, made with bamboo: <http://www.poleplant.com/>

Fabrics

- Wool: <https://www.woolmark.com/education/fibre/benefits-of-wool/?enforce=true>
- The story of microfibers: <https://storyofstuff.org/movies/story-of-microfibers/>
- Patagonia Reference Library: <https://www.patagonia.com/reference-library.html>