

**Elk River Nordic Team**  
**Wax Tips**  
(also – check out [www.swixschool.com](http://www.swixschool.com))

**Basic Tools:**

- Waxes: Range of temps, the Swix CH line and the Fast Wax HS line are great practice wax
- Good Iron, (not the family laundry iron)
- 2 Plastic Scrapers (One for glide wax, one for kick wax; make sure to keep them separate)
- Fiberlene and Wax remover for removing kick-wax
- Wax Bench
- Groove Scraper
- Nylon Brush
- Horsehair Brush

**So why do we wax?**

To keep your skis in good condition and moving swiftly, you need to take care of them. That means taking the time to wax your skis. If you give your skis a little TLC now to keep them hydrated and in good shape, it will defiantly come back to you in faster skis and shorter times.

The reason we wax is to keep the bases from oxidizing. If you look at an older pair of skis, you will see white patches that resemble small hairs; this is part of the oxidation process. If you don't keep your skis in good shape, this can slow your skis down. It will also take more work to move you over the snow. Instead of just gliding along, you will feel a suction cup effect of your ski bases on the snow. When they are waxed, the skis repel the water your skis create while skiing on the snow. Without the wax, the bases of your skis don't repel the water as well and instead act like a suction cup against the snow. Thereby slowing you down and making you work harder.

**Getting Started**

Keep a few things in mind as you get started waxing:

- Setting up a permanent waxing station is helpful. By having a set area for working on your skis, it helps control the mess and also gives you a better shot at waxing. If your station is already set up, you are much more likely to head over and put a coat of wax on your skis then if you had to pull out the wax stand, find an iron...
- Containing the mess is also a great way to keep things in better shape. Having a shop-vac on hand is an easy way to get all those wax shavings picked up off the floor. Make sure your wax form is mounted on a secure base; you don't want it tipping or moving while you scrape.
- A good waxing iron is important. You may think it is a great idea to run upstairs and grab your parent's clothes iron. **Stop! Reconsider.** First, they won't appreciate you using that iron on your skis. Just think of your dad putting on his white dress shirt with a big pink iron shaped spot on the back. Your skis may have appreciated that extra coat of CH8 on them but I guarantee that your father is not going to be so grateful. Along with keeping the clothes in good shape, the main reason to get a good quality ski iron is to take care of your skis. The ski iron might seem expensive, just **remember**, "To use a cheap iron and burn a \$300.00 pair of skis is a sad day." Always check the temperature guide for the wax you are using, most of them have the iron setting right on the wax package now. Ski waxing irons have enhanced temperature control and can improve the flow of the wax onto the ski. Always turn the iron on several minutes before waxing. This will allow the iron temperature to stabilize and ensure even wax penetration. **\*Note: The iron should never be so hot that it is smoking.** If the iron does begin to smoke, turn the temp down and wait for it to cool slightly. You only want the iron just warm enough to melt the wax.
- Vent the waxing station. A home made fume hood over the bench with a heavy duty kitchen exhaust fan clears the air and prevents fumes from entering the household living quarters. But this may be a little extreme for your situation, a 3M mask or filter to cover your mouth and nose is another option.
- Make sure that your wax station is convenient and safe.

## The Details: Waxing Instructions

- When you are waxing skis, always work the ski from tip to tail (scrape, brush and iron), never in the reverse direction. As skis are made fast by layers and layers of wax, **never use wax remover to clean the glide zone** of a ski, unless extreme conditions prevail; skied through oil, cow pies or something equally nasty. Instead, clean the ski by melting and ironing in a soft layer of wax on the base (Swix CH 8 or 10, Fast Wax HS 40 or equivalent), then scrape it off immediately with a plastic scraper. Repeat the process if necessary.
- Crayon on a layer of wax, you never want to drip hot wax or touch a hot iron to a dry ski. Take the waxing iron and hold it perpendicular to the ski dripping wax onto the ski base on both sides of the groove, making sure enough wax is available to cover the total ski base from tip to tail. (be careful, you don't want to waste extra wax either) After dripping wax onto the ski base, iron the wax into the base using light pressure, moving the iron from tip to tail in a continuous motion.
- If you have adequate wax on the ski and the waxing iron is at the correct temperature, you'll pull a molten bead of wax about 1 - 2 inches behind the iron. The speed of the iron should be slow, but steady. Each pass across the base should take 5-7 sec and you should make 5-7 passes.
- The iron should never be smoking, that is a sign that it is too hot and the iron should never stop in one spot on the ski, you will run the chance of burning the bases. Scrape the groove and edges of the ski while the wax is still slightly warm. This will help prevent you from jumping the edges and scratching your ski base. The wax will be a little softer and you will still have wax protection on the rest of the ski.
- Allow the ski to cool completely at room temperature before scraping the ski with the plastic scraper (15 min). Ideally, the ski should be allowed to cool in a warm environment (it may be OK for you to go from the sauna to the snow but is not advised for your freshly waxed skis). This is especially true with soft waxes, as they crystallize slower and take more time to set up. If you're applying more than one coat of wax, scrape the ski between each waxing. The scraping process opens up the micro-structure of the ski base and the ski will be able to absorb more wax.
- For racing skis, give the ski a minimum of two coats of wax.
- After scraping, brush the ski to clean the base structure using a coarse brush first, followed by a fine brush and then polish with nylon brush. The new roto brushes work well for polishing skis; however they take some experience to learn. If you're just starting to learn how to wax, hand polish the ski. Plus by hand polishing, you'll develop a positive Karma with your skis! ;-) Do not use an abrasive pad to polish the ski base after waxing. This just removes the wax as if skiing 50 K on abrasive snow.

## Basic Step-by-Step Waxing Instructions:

1. Always work the ski from the tip to the tail. (Never go in the reverse direction.)
2. Clean the ski.
  - Crayon on a layer of warm wax, then drip it on
  - Melt wax onto the ski base and iron in from tip to tail (5-7 sec/pass, 5-7 passes)
  - As you pass the iron along the ski base, there should be a glistening trail of warm wax about 1 or 2 inches long following behind the iron. Any longer than 1 or 2 inches and the ski is getting too hot, you are moving the iron too slowly, keep it moving.
  - Scrape warm with a plastic scraper
  - Repeat the process if necessary
3. Base Preparation.
  - Remove the fibrils with a Scotchbrite pad
4. Wax for current conditions
  - Crayon on a layer of the wax of the day, then drip it on
  - Melt wax onto the ski base and iron in from tip to tail (5-7 sec/pass, 5-7 passes)
  - Scrape groove and ski edges while still slightly warm
  - Allow the ski to cool at room temperature then scrape with a plastic scraper

### Repeat step 4 at least once

5. Brush the ski with a brass brush, horsehair brush and then the nylon to clean the structure and polish.