

# Cold Weather Piping

At some point we've all been asked to play in cold conditions. As a student you should know the hazards of playing in cold weather:

Thermal stress: I know of a piper who split and broke a \$250 chanter from the thermal shock of playing it in the cold. Replacement drone parts take typically 4-8 weeks if you can order a new part - and the ferrules and projecting mounts won't ever really match. The repair cost for a set of drones which is still made (e.g., Hardie, MacLeod, Gibson) will be about \$200 per part. For those with drones where the manufacturer is out of business (e.g. Tweedie, Lawrie, Grainger) the repairs can be very expensive and can take several months because there aren't many people who do that kind of work. The cost will be upwards of \$1000 if mounts (i.e., imitation, ivory and/or silver) have to be removed. Consequently, most people won't want to take the risk.

Water condensation: Moisture from your breath condenses in the drones and chanter. If you can see your breath, it's cold enough that this is an issue. The humidity in your breath is pretty constant. As it gets colder outside the air can hold less moisture and, more of the moisture in your breath is wrung out in the drones and chanter. The moisture builds up, floods and eventually shuts off the drones. Hence, reliability is an issue. Playing time is limited by the outside temperature (cold=short). The piper will usually play minimally to avoid a disastrous (on a performance basis) build-up of moisture. This moisture will commonly drip down into the tuning joints in the pipe and can cause splits. The high tech bags with desiccants really don't help much because normal desiccants don't work real well in the cold! At a minimum - after playing in the cold, the pipe must be taken apart and meticulously dried. Commonly, a fairly complete overhaul is needed including removal of hemp from the tuning pins as it will likely be soaked. If you plan to play a wooden pipe in the cold, please oil it first to minimize moisture uptake.

Flexibility/Pliability of the reeds: The main plasticizer in a wooden reed is the water. It is possible to set up a bagpipe to play within the range of 40-90 degrees F because the differences in flexibility of the reeds are not large over that range. When it gets near freezing, the chanter reed will stiffen and not play. When you play in the cold and then stop, the reeds will cool off and stiffen to the point that they won't play (chokes) or will only squeal.

The player: The cold is very hard on the player. The heat loss due to the physical exercise and the exchanges of air going through the lungs is significant. The heat loss out the hands is also significant. The loss of heat requires a great deal of energy, so exhaustion is a common side effect. Dehydration due to the need to add so much moisture to the air is another issue. Raw throats are common. Frostbite becomes a problem because you're blowing warm moist air past cold fingers where it eventually begins to freeze. Depending upon the flexibility of the skin, cracks eventually form near the edges of the nails. The left thumb is particularly prone because of the moisture dripping down the bore of the chanter and out the hole in the bottom. Chapping of the

lips is an issue due to the need to keep a seal around the blow stick. Fluid flow from the sinuses becomes quite large due to the degree of exercise and many people have burst eardrums after playing in the cold (sniff-sniff-kaboom). Head and chest colds are common after such gigs. When I do play in these conditions, I wear shooter (fingerless) gloves and am dressed in multiple layers to absorb the sweat.