It is possible to play the notes of the high register, from E on up, more quietly than usual without the pitch going flat. While playing one of these notes, roll your T1 finger very slightly off its hole, toward the foot of the whistle. This will uncover just a tiny bit of the top edge of the T1 hole, making the pitch of the note go sharp. To compensate for this, simultaneously blow a slower stream of air. The pitch will, as a result, assume its correct place and the note will sound quieter than usual. This is a difficult balancing act, especially when the music is moving fast. With lower pitched whistles, the T1 hole is larger and the technique is consequently easier to use. One could use this technique with the flute as well, but there are better ways to control flute dynamics.

GET TO KNOW YOUR WHISTLE

Now that you are aware of a wide range of blowing and embouchure techniques you can explore them on your whistle and discover how it responds. Try the following experiments, first without tongue or throat articulations. Introduce articulations later if you like and see what effect they have.

- Find the *minimum* amount of air-speed change required to kick a given note up into the second octave.
- Listen to how flat the upper-register notes are when played this way.
- Try this on different notes and notice how things change, especially in your throat, as you move up and down the scale.
- Find out how much more air speed is necessary to bring the high-register notes into good tune with the low-register ones. Try blowing them *too* sharp and see how that feels. Explore the limits, and always listen.
- Try tuning the high-register notes with embouchure, and then without using embouchure. Notice the differences in tone quality when you do and don't use embouchure to tune the notes.
- Try playing some long notes and move in and out of using embouchure to alter the tone quality. Try to do this while keeping the pitch stable and see how your air usage changes.

If you are new to the whistle these may be difficult experiments. But try them, and return to them as your experience deepens.

The use of these air control techniques will eventually become second nature to you. Irish music often requires us to change rapidly, and sometime repeatedly, between the two registers. You will discover ways to use these techniques, and the tonguing techniques described in Chapter 20, to enhance your agility and fluidity as a player.

LONG TONES

There is a warm-up exercise that is of special benefit to flute players which can be helpful for whistle players too, though it may not seem so at first. If you would like to read about it, turn to the section *Long Tones: Another Very Useful Exercise* on pp. 103-104 in Chapter 6.

Breathing, and Leaving Out Notes

As you have probably observed, there are virtually no breathing places built into traditional Irish music. We have to create them. With very few exceptions, such as some places in slow airs and other slow and moderate tunes, it does not work to sneak a breath between notes. Doing so almost always disrupts the flow and energy of the music, drawing attention to your breathing and away from the music. Whistle players must learn how to leave out notes, and shorten longer notes, in a musical and tasteful way. When this is done well, most listeners will not even notice your breathing.