Testing the signals' sound quality for the ABYC-required six seconds meant a lot of pump action on the West Marine EcoHorn, above.

How We Tested

We conducted two sound tests. In the first, each device was actuated 1 meter (39 inches) in front of a Radio Shack decibel meter. That's pretty straightforward.

In the second test, we relied on the human ear—that is, the hearing of the testers—to determine whether each sound signal was audible at distances of one-eighth, one-fourth, one-half, and 1 mile. Tests were conducted on a freshwater lake, with temperatures in the low 70s, and a soft wind behind the sound signals, which makes our results slightly wind-aided…in the parlance of track and field.

In the third part of the evaluation, we also blew each horn or whistle for the required length of time (six seconds) specified by the ABYC, and made a subjective determination of sound quality.

For example, if one horn sounded strong for six seconds, and another faded or warbled toward the end of six seconds, the first received a stronger rating for sound quality.

Lastly, we examined each device for quality of manufacture, though we didn't find a lot to comment on, as these are mostly cheap, plastic products.