



# How to Use Binoculars

*This information is adapted from the Sister Shorebird Schools Arctic Nesting Curriculum.*

## Teacher

Usually, we must account for a difference in eye strength when using binoculars. Center-focusing binoculars have an adjustment to compensate for eyes of unequal strength or vision. You will notice that only one eyepiece is independently adjustable, and it has a scale marked off in diopters, the optical measuring unit for spherical power. Note that the individual eyepiece setting, once adjusted, can be considered permanent. The scale reading should be noted and checked occasionally as it may be accidentally moved by handling or in moments of excitement.

To adjust binoculars for any difference in the strength of your eyes, first, using the lens cover or your hand, cover the objective lens (the outer, big lens) which is on the same side as the adjustable eyepiece. With both eyes open to avoid distortion by squinting, look through the binoculars and, using the central focusing mechanism, focus on a distant object until it is sharp and clear. Now transfer the cover to the other objective lens. Again with both eyes open, but this time using the adjustable eyepiece, focus on the same object until it is clear.

Your binoculars are now properly focused for your use. Now, all you have to do is use the central focusing mechanism to focus for objects at various distances from you.

Focusing on moving objects and focusing quickly on something that is about to fly or move out of view are real challenges. If you practice, over time you will be surprised to find how your coordinated use of eyes and binoculars improves. Be patient and practice, practice, practice.

Another challenge is finding and focusing on objects in the sky. This is because the sky has depth, and there is not a background of objects (trees or horizon line) to use as reference points which both find your object and figure out what distance it is at.

Note that many binoculars have rubber eye cups which can fold down for use with glasses or sunglasses.

