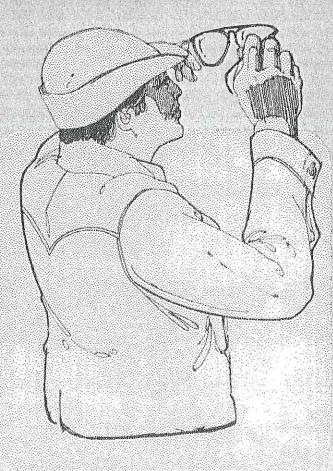
# Vision and Physical Fitness



# Introduction

The wise hunter has a complete medical examination each year before the season starts because he knows he must be in good physical condition to enjoy the walking, climbing, and other exercise he will do while hunting.

Too often, however, sportsmen fail to have their eyes examined as well.

## **Vision**

Correct eyesight is extremely important to the hunter. No matter how well he knows the rules of safe hunting, if his vision is impaired and he cannot distinguish objects clearly against a background of trees and brush, he is a danger to himself and to others. Corrective lenses can

almost always help defective eye-sight and it is seldom that a person who wears glasses has to give up hunting.

Knowing your visual limitations and adjusting your hunting habits to compensate for them can help avoid accidents. If you know you don't see well at dusk or in the early dawn, hunt only during bright daylight. If the sun's glare impairs your vision, wear sun glasses. If you normally wear glasses, then be sure to wear them when hunting.

Even hunters who do not need corrective lenses should wear plain glasses while hunting to protect their eyes from branches, brambles, and twigs, dirt and other debris.



## Visual Abilities

#### **Distance Acuity**

The ability to clearly see a distant object in detail is called distance acuity. A person who has normal distance acuity can focus on an object at least 20 feet (6 m) away and will be able to see the object in detail under a variety of lighting conditions.

Game is usually well camouflaged by its natural coloration which blends with the landscape. Often the only sign that game is present is the blink of an eye or the flick of a tail. The hunter must be able to clearly distinguish the form of the animal to recognize it.



#### **Nearpoint Vision**

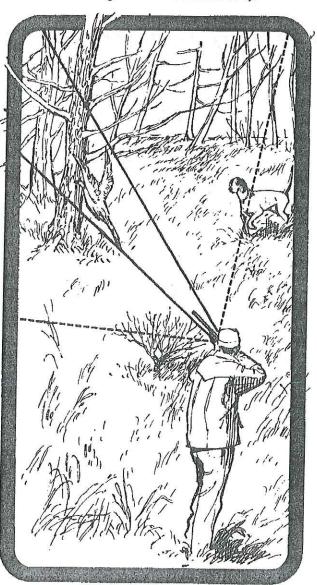
The hunter must also have nearpoint vision—the ability to focus clearly at close range. If close-up objects appear blurred or fuzzy, or if you have difficulty in aligning iron sights, your nearpoint vision may not be as sharp as necessary for safe and accurate shooting. Glasses will help this condition or a telescopic sight may solve the problem of sighting.

#### **Depth Perception**

Depth perception is the ability to judge distance accurately. If you consistently misjudge distance, it could be that your depth perception is inadequate. An eye examination will identify if this is so and what can be done to correct the problem.

#### **Peripheral Vision**

A hunter needs to see more than what is immediately in front of him. He must be able to see things moving on either side, above and below him, and be aware of any objects within the immediate area of the target. This wide field of vision is called peripheral vision. Good peripheral vision allows the hunter to see objects within the target area without having to move his head or body:



#### **Binocular Coordination**

Binocular coordination is when both eyes are working together in balance. A person who has good depth perception and adequate peripheral vision plus binocular coordination, will be able to see his target clearly even against a background of brush or trees.

#### **Light Gathering Ability**

The ability of the eye to form images and detect color under a variety of light conditions is important. This ability may vary greatly from one person to another.

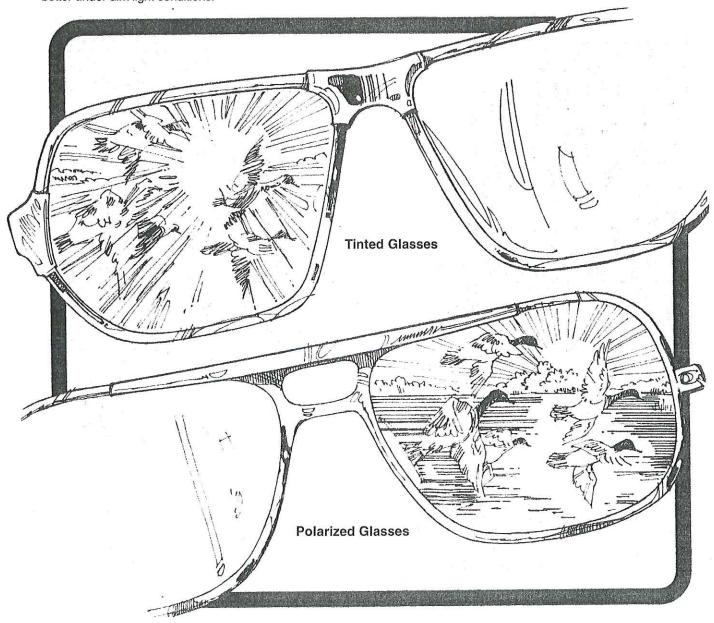
Tinted glasses can help the hunter see his target clearly under varying light conditions. For persons who are sensitive to the sun's glare, polarized sun glasses tinted green, brown, or smoky in color are recommended. Some lenses are specifically designed to help the wearer see better under dim light conditions.

#### Color Vision

Color vision is the ability to distinguish between colors and detect a range of colors within the visible light spectrum.

Many hunters are unaware that their color vision is defective. When a hunter is aware that he has a color vision problem, he can take extra precautions to overcome this problem. An eye examination will quickly detect any abnormality in color vision.

Blaze orange is one of the most visible colors to wear in the woods. Tests have proved that fluorescent colors, especially blaze orange, are seen readily under almost all light conditions. Even persons with color vision defects are usually able to distinguish blaze orange.



#### Perception

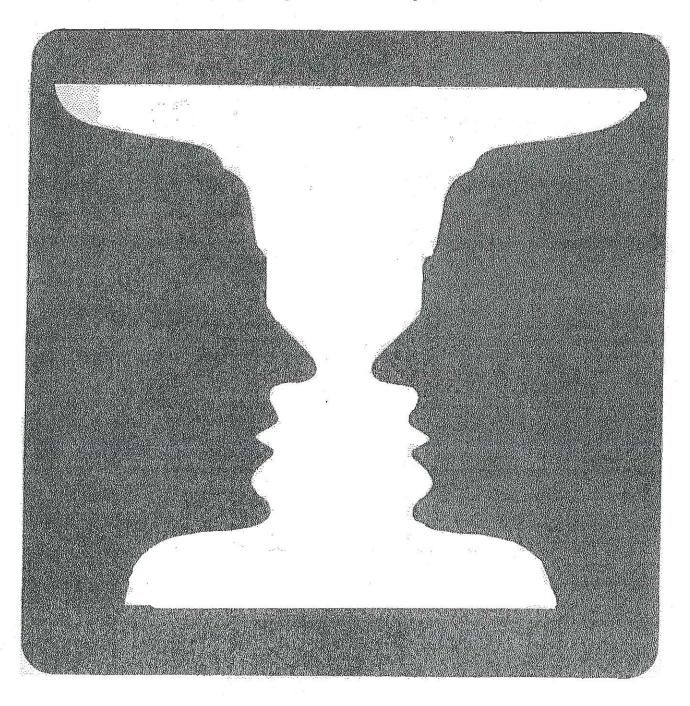
The way we see and the way we react to what we see is called perception. Understanding perception is very important to the hunter.

Our eyes often play tricks on us. Our minds can register what we want to see and not what is actually there. Most hunters have on occasion mistaken a tree stump for a deer, or been positive they saw a deer when there was none.

Hunters are often exposed to seeing, first a blur and then the actual object. The blur caused by early morning mists and the gray-blue twilight at dusk, coupled with the intense desire to see an animal target, can trick you into believing that you see what isn't there. To eliminate a blurred image, it is often useful to look away from the object and think about something else. Then look back at the original object.

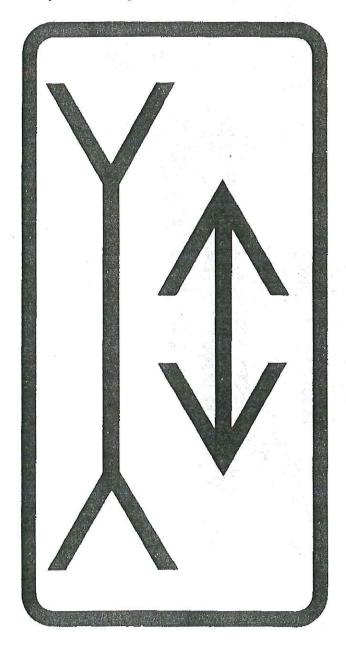
It is possible for two people to look at the same object and see entirely different things.

In the illustration, do you see a white vase, two faces or something else?



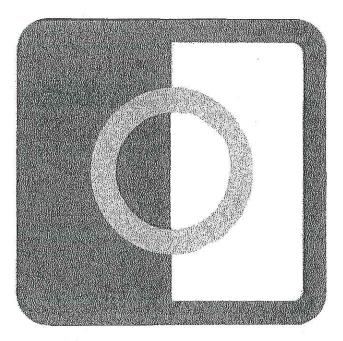
When you see a vase in the picture, the white portion of the picture has taken form and the gray portion appears as formless background. When you perceive two faces, the gray portion has form and the white portion appears as background.

Our eyes can also play tricks on us in perceiving the size of objects. When you look at the illustration, do you see a short middle section and a longer middle section? Both are actually the same length.



Our eyes can deceive us by seeing some objects brighter than others when in fact they are the same. In this illustration the circle appears to be a uniform gray color, which in fact it is. But if you place a pencil on the line separating the black and white sections, the gray portion against black background appears to be brighter. Move the

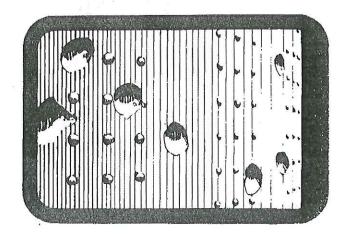
pencil across the figure to the right and the brighter gray extends into the white. Move it to the left and the darker portion appears to recede into the black.



Our minds may also tell us we see movement although the object is still. Motion pictures and television are examples of this illustration. The movement we see in movies and television is actually a series of still pictures—each projected separately for a fraction of a second.

You can create the same effect by placing your index finger about three inches in front of your nose. Wink each eye alternately—your fingers will appear to move from side to side.

Light and shadow also affect perception and create illusion. In the illustration, there is a section of boiler plate with several dents. If the illustration is turned upside down, the dents will appear as bumps. The reason this illusion occurs is because we are accustomed to living in a world where most light comes from above us.



Shadow can also play tricks on your eyes when you are hunting.

Look at the deer in the illustration. Read all the words aloud. Did you miss the extra "a"? Most people do because their mind tells them what they should see before their eyes can register what they actually see.

Considering the many factors that may affect your perception while hunting, it is important to take a second and third look at your target before you start.



# Improving Vision Through Eye Training

No matter how good your vision is, it can be improved. There are several eye exercises which will sharpen and train the eyes to see clearly and perceive accurately.

Before the hunting season starts, it is wise to spend time outdoors as if you were actually hunting. Try to find as much wildlife as possible, stalking it within range before it becomes aware of your presence. Make several such trips at different times of the day and under different weather and light conditions.

On these expeditions, take note of your surroundings and commit the scene to memory. Notice the fine detail of the landscape and look for animal tracks and droppings.

Look for movement. Few animals stand motionless for a long period of time. The tail of an animal is usually seen first. However, slight head or body movements may also be detected. Notice which way the wind is blowing from the movement of the leaves.

Even though it may be impractical for you to go into the woods before hunting season starts, you can practice eye exercises. While riding in a vehicle, focus on distant objects and try to define as much detail as possible. Keep your eyes moving. Practice reading road signs as far down the road as possible and try to identify the license numbers of passing vehicles. See how much information you can retain.

Color slides are an excellent aid to train your eyes to see and register objects accurately. Flash the slides on and off the screen. Then try to recall everything you saw in the slide. List everything you can remember—colors, objects, activities. Try to increase your speed of recognition by flashing slides on and off the screen more quickly.



# Vision Rules for Hunters

 If you normally wear glasses, wear them when you hunt. A tiny amount of wax on the surface of the lensrubbed up to a high gloss—will help eliminate fogging. Or you can buy commercial preparations for this purpose.



- 2) Every hunter should wear safety glasses to protect his eyes to prevent injury from twigs, branches and other debris as he moves through the bush.
- Always double-check your target. You can train yourself for this by working on your ability to distinguish figures against backgrounds that blend with their natural color.
- 4) Blaze orange is the easiest color to see. Make it part of your clothing.

- If you know you are color blind, take precautions to overcome any problems which could occur as a result of this condition.
- 6) Before aiming at a game animal, check to ensure nothing will move in the way of the shot.
- 7) Have your eyes checked at regular intervals, preferably once a year. The hunter should have his examination just prior to the hunting season.
- 8) Remember your eyes can play tricks on you. Be sure you see what you "think" you see.

# **Physical Fitness**

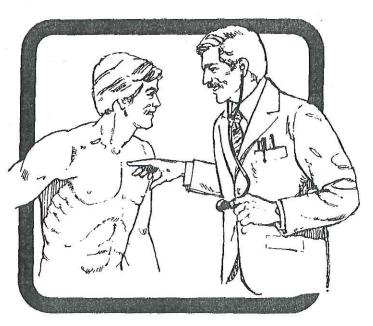
Your physical condition has a great deal to do with how well you will hunt and how much you will enjoy hunting. Always get in condition before going out into the field. Know your limitations and stay within them.

#### **Visit Your Doctor**

See your doctor before the hunting season begins and follow his advice.

#### See Your Dentist

A toothache can be as immobilizing as a sprained ankle. Be sure to have a check-up before the season starts.

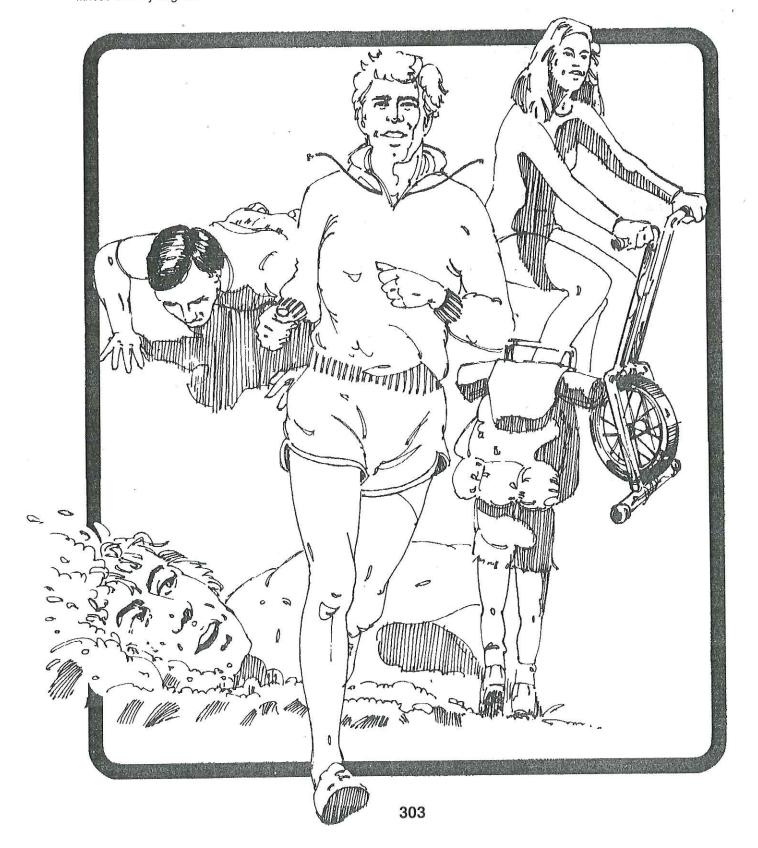


#### **Body Conditioning**

All people are not the same physically. Ask your doctor to suggest a program of conditioning specifically for you. If you are not "in shape" or are "out of condition," take it easy for the first day or two of hunting. Build up your endurance and fitness level by degrees.

#### Rest

Rest is vital to a person's well being. Lack of sleep and proper rest will limit your enjoyment of the hunt.



### Notes

