

## Reading Mirage

***Mirage*** is heat wave generated in the atmosphere from the warming of air in a particular area. Mirages looks like a distorted or wavy lines in the air. These waves can be seen easily in your optics due to the amplification effect the lenses project on the atmosphere. We have all seen mirage with the naked eye on a hot summer day, but through an optic, mirage is present even on the coldest days of the year. Here are some helpful hints on ready mirages.

### Boiling mirage-

Is a wavy line that travels from bottom to the top of the optic and indicates that there is no wind at that particular location.

### Mirages MPH-

With 3 to 5 mph wind speed, the mirage will travel from an 8 o'clock position to a 2 o'clock position or a 4 o'clock to 10 o'clock position.

With a 6 to 9 mph wind you will see the wave move 9 o'clock to 3 o'clock or vice versa. The waves will typically fill the lens of your scope.

At 10 mph for above, you will find the same things happening as a 5 to 9 mph wind. The *only difference* is that you will only see the mirage in the bottom half of the lens. The top half should be much clearer.

Be aware of up drafts and down drafts when shooting. This is especially true when you are hunting the mountainous states. They are more prevalent in these areas. Up drafts and down drafts are when wind hitting a face of a hillside follows the angle of the hill face. These drafts will hold that direction until it gets to the top or bottom of the hill. This can affect bullet flight by either holding it in the air longer with an up draft or pushing it down in a down draft. This will have the biggest affect when shooting into the wind at a  $\frac{1}{2}$  value. *Do not confuse* an up or down draft with a thermal. Thermals are blobs of warmer or cooler air that are moving up or down a hill. These are usually only present in very low to no wind area and don't usually have much effect on the bullet flight.

