

HOW TO READ WIND

Part 1 (By Angus Bell)

It takes time in target rifle shooting to learn the best methods to read the wind and know what sight settings need to be applied, but there are some general rules that will assist all competitors to learn the basics, here are some tips that may help :

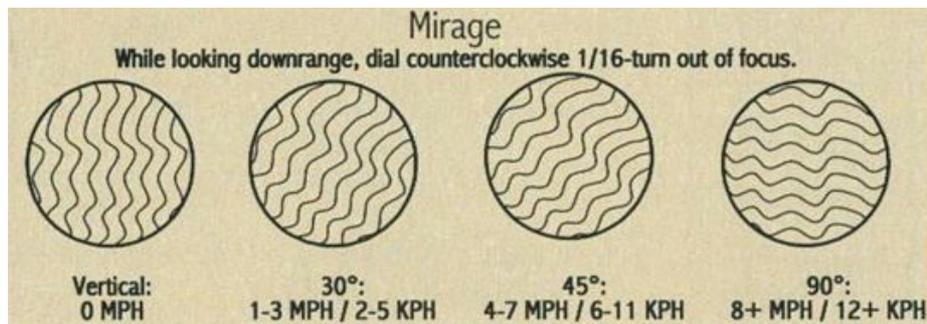
1. At 900y the wind strength in mph equals the sight setting in MOA for a 3-9 o'clock wind :
 - a. 4mph = 4 MOA
 - b. 8mph = 8 MOA
 - c. 12mph = 12 MOA
 - d. 16mph = 16 MOA
2. At 700y, 500y and 300y using the above information we can glean the correct sight setting also :
 - a. 700y = 75%
 - b. 500y = 50%
 - c. 300y = 25%
 - d. So the wind effects and sight settings are :

	4 MPH	8 MPH	12 MPH	16 MPH
300y	1	2	3	4
500y	2	4	6	8
700y	3	6	9	12
900y	4	8	12	16

- e. When the wind is at the 45 degree angle, just half the above values

MIRAGE

1. Sometimes the wind flags do not provide all the information you need and other wind sources need to be scrutinized. Mirage is the heat waves generated from objects, you will remember seeing these heat waves on a tarmac road on a hot day. On a rifle range we can sometimes see these heat waves on :
 - a. Target edges
 - b. Mantlet
 - c. Firing mounds between the firer and the target
2. By using your spotting scope try first focussing on the target, then re-focus at a shorter distance. For example at 500y try and focus on the 200/300y mound, you should still be able to see the target but if the conditions are suitable you may also see the heat shimmer rising between you and the target and these waves will be moved by the wind :



- a. Vertical waves – this shows that the mirage has not been moved, and no wind is present, so sight setting should be set to 0
- b. 30 degree waves – this shows a gentle wind effect so wind settings should be slightly set and indicates the wind is around 1-3 mph
- c. 45 degree waves – this shows a slightly stronger wind effect so wind settings should be slightly set and indicates the wind is around 4-7 mph
- d. Short horizontal waves – when the heat waves shorten in length the wind has increased and will be running at the maximum that can be easily read, so wind settings should be set for a wind strength of around 8+ mph
- e. Stronger winds over 10-12 mph are not generally useful for reading mirage

Here are some wind reading rules that may assist :

RULE NO 1

Get onto the mound quickly and observe the wind before you shoot looking for trends, try to identify a good flag for direction and strength (they may be different).

RULE NO 2

Use your sighters as a measuring tool to determine the effect of any particular wind condition. If the wind is changing rapidly you may choose to shoot your sighters in 2 different wind conditions to determine what the correct strength is.

RULE NO 3

If possible, select a wind condition which is easy to quickly identify by any means at your disposal (flags/mirage), and shoot as many shots as possible while the wind is in this strength/condition.

RULE NO 4

When a change in the wind condition is detected, STOP - Don't gamble and just fire the next shot. Either wait it out till it returns to the known value, or make a wind change. The most frustrating inner 4 is the one you fired when you didn't make a change that you thought you should.

RULE NO 5

With the wind always play the percentages and adjust the sight for a safe bullseye. If you see a small change don't just hope you will sneak it in – make the change, always go for the V Bull then you have a margin for error.