

# Simple Wind Reading

Simple things to watch for and assist you in getting better scores

The flight path of a projectile is influenced by a number of factors, including;

- Bullet shape (Ballistic Coefficient)
- Cross range winds
- Atmospheric Conditions
- Gravity
- Distance to target
- Muzzle Velocity
- Accuracy of discharged shot

# Wind Reading 101

- In simple terms the wind factors that will influence the projectile are:
  - Wind Speed
  - Wind Direction

## **How to measure speed**

For ease of reference shooters use 5 basic speeds which are:

- Gentle (4 mph)
- Moderate (8 mph)
- Fresh (12 mph)
- Strong (16 mph)
- Very Strong (20 mph)

# Flag Patterns of wind speed



4mph. - Gentle



8mph. - Moderate



12mph - Fresh



16mph. - Strong

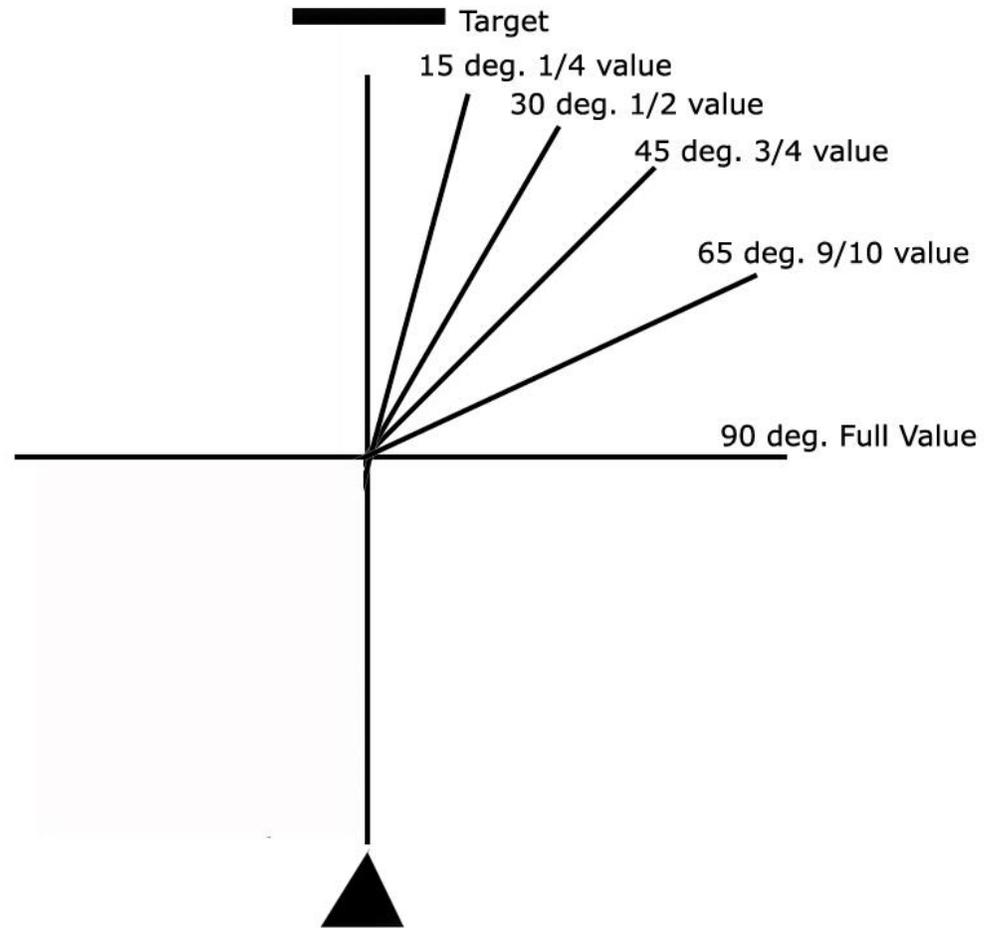


20mph – Very Strong

# Wind Direction Effects

- Wind can vary in direction over 360 degrees
- This can be simplified into 4 quarters with similar characteristics
- We refer to the direction as if the flag is a clock face.
- So a 3 o'clock wind has the same effect as a 9 o'clock
- Wind speed effects on a bullet are NOT uniform at varying angles i.e. a 45 degree angle does NOT equal a 50% wind effect.
- Wind Directions can impact on elevations as well.

# Wind Direction Effects



# Wind direction and grouping

- You need to look for the predominate PATCH of wind to try and shoot in so that minimal impact is made to your groups.
- Generally in a wind that is “Fresh and above” and blowing up range its best to watch the flags closest to the targets
- In a “Fresh wind and above” blowing down range its best to watch the flags closest to the shooters.
- For Cross winds and winds angling between 30 degrees and 90 degrees its better to watch the flags closest to the shooter
- It is easier to get better scores in squarer winds than fishtailing winds due to this effect that directional changes can have on groups



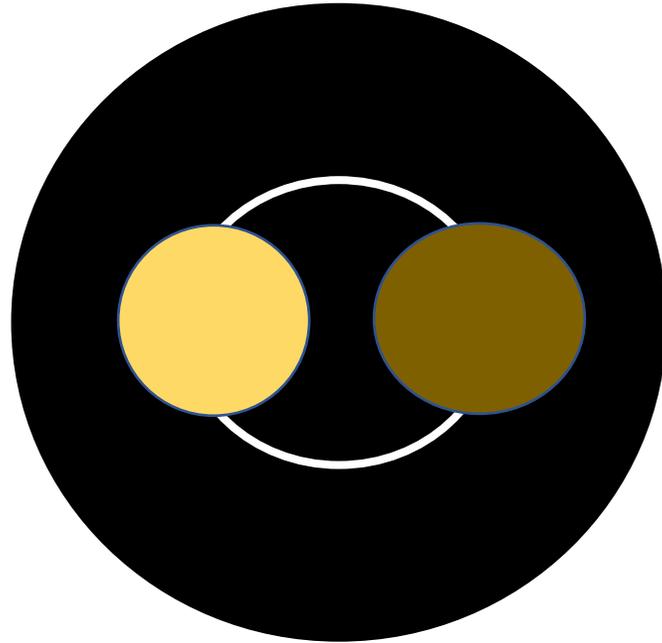






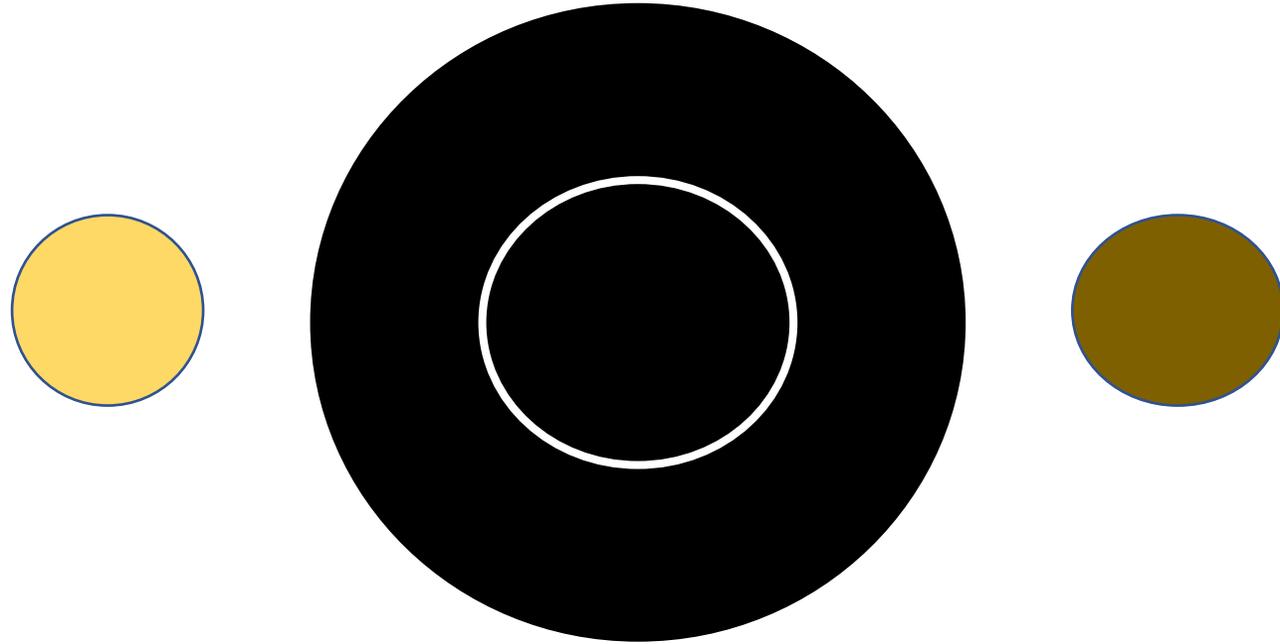
# Wind Variation and grouping

- Grouping in squarer winds is easier due to the impact of only  $1/10^{\text{th}}$  wind variation required between 65 degrees and 90 degrees



# Wind direction and grouping

- Grouping in fishtailing winds is harder due to the impact of up to 9/10<sup>th</sup> wind variation required between 0 degrees and 65 degrees



Heat Haze can also be used to read wind  
close to the target

How is it  
moving?, is t  
stationary,  
up down, left  
right etc.



# Rules of Thumb

- On all targets the scoring rings up to the 4 line are generally at  $\frac{1}{2}$  minute increments from centre on all ranges
  - So the V bull is  $\frac{1}{2}$  minute from centre to bull line
  - The Bull is  $\frac{1}{2}$  minute from v to 4 line
  - The total bullseye is about 2 minutes across
  - The 4 line is about another  $\frac{1}{2}$  minute to the 3 line
- 'If in doubt pull a wind calculator out'

Wind reading is down to **experience**.

Try not to get frustrated when it goes wrong

Enjoy your shooting 😊