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### "Wind: The Enemy of my Enemy is my Friend" by Ron Elbe

There's an ancient proverb that says "The Enemy of My Enemy Is My Friend". That's how I feel about difficult shooting conditions, particularly the wind.

The wind isn't naturally a friend of mine. But, many shooters consider the wind to be their enemy. And those shooters are my "enemies" (i.e. my competitors). That makes the wind my friend.

Admittedly, it's an uneasy friendship at best. The wind tries to beat me just like it tries to beat my competitors. But, I've found ways to make her less of an enemy to me. In fact, I look forward to windy match days. In this article, I'll try to share with you my methods for making the wind my friend.

What I'm going to share with you in this article is applicable to all shooting. But, it's particularly applicable to rimfires and even more particularly to rimfire benchrest shooting. The notoriously poor ballistic coefficient of lead rimfire projectiles makes them very sensitive to wind. And rimfire benchrest is an exacting sport that requires pinpoint accuracy at 50 yards.

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There are two aspects to making the wind your friend----psychological and technical. In order to make the wind your friend, you must master both aspects.

#### PSYCHOLOGICAL ASPECT OF SHOOTING IN THE WIND

Let's tackle the psychological aspect first. How you feel emotionally about the wind can have a major impact

on your score.

Most shooters would agree that negative emotions can adversely affect your score. But, not so many shooters would understand that positive emotions can be as bad as, or worse than, negative emotions. The most productive emotional state is stoicism. To shoot your best, never allow yourself to have any emotions, good or bad. Emotions release adrenalin. Adrenalin gives more brute strength; but it adversely affects fine motor coordination. In addition, if you allow yourself to be happy about a good shot, you'll also be disappointed about a poor shot. And, psychologically, the disappointment will outweigh the happiness. Then, you'll get discouraged and fail to shoot subsequent shots as well as you could. Before and during the match, it's best to remain completely stoic. There will be plenty of time for celebration or mourning after the last round is fired.

So, let's talk a little about how to put yourself in the proper frame of mind, both before and during the match.

Before The Match, you should consciously remind yourself that:

1. The wind is just as bad for everyone else as it is for you. The wind does not put you at any disadvantage. It is only a disadvantage for shooters who allow it to psychologically bother them.
2. You shouldn't expect to shoot a personal high score. It would be unrealistic to expect to shoot your best scores under adverse weather conditions. Any time you shoot (particularly in the wind) it is very important to have realistic expectations.
3. You shouldn't even expect to shoot great scores. The wind will probably lower scores. But, it will lower EVERYONE'S scores. Once again, wind is not a disadvantage for you.
4. Now here's a tough one for most shooters to swallow. At a gut level, you absolutely must believe that winning does not matter. "Winning" or "Losing" are emotional thoughts. If you think about winning, each good thought will raise your hopes and each bad shot will increase your fears and self-doubts. And your emotions will contribute to your downfall. Instead, focus on stoically shooting each shot to the best of your ability. In truth, you have very little control over whether or not you win. Other shooters and their scores will determine that. However, you have complete control over whether you shoot each shot to the best of your ability. Your goal should be to finish the match knowing that you have executed each shot to the best of your ability.

If you merely accept these four truths, you'll already have an advantage over most shooters before the match even starts.

During The Match, you must:

1. Trust your rifle and your wind flags.
2. Refuse to worry about previous shots. Just calmly learn from them and move on.
3. Remain emotionally detached. Stoicism will prevent your emotions from causing you to rush your shots. Remain calm. Wait for your wind conditions. Don't talk yourself into an unsure shot. If you want/need to shoot a new condition, go back to the sighter bull and record the point of impact.
4. Focus totally on execution of the current shot. Any emotion (either positive or negative) can cause you to lose focus.
5. Just shoot, study the previous shots, learn from them, and shoot again. Make each shot the best you can shoot in the conditions.

Accepting the conditions, refusing to become emotionally involved, and maintaining the correct goal will take you halfway to making the wind your friend.

#### TECHNICAL ASPECT OF SHOOTING IN THE WIND

The other aspect of making the wind your friend is technical. A solid, consistent technical approach improves both your actual score and your confidence in your abilities. Let's look at the technical aspects step by step.

Here are the steps you can take to improve your scores on windy days.

1. Buy good equipment. Then shoot it enough that you know it and its capabilities. Have confidence in it. Without confidence, you'll find yourself questioning your equipment for each bad shot rather than just accepting that it's the wind.
2. Buy good wind flags and learn to read them. (I personally love Wick's double tail flags with whirligigs. There, that should start a fight among the experienced shooters!) All of your flags should be identical. Three to six flags are adequate for rimfire benchrest. More flags give more data, but are more difficult to keep track of mentally. I use four flags set at 10, 20, 30, and 40 yards. I watch all of my flags, but give more emphasis to the closer flags.
3. Practice EXACTLY the same way you will shoot a match. Set up your rests the same way. Put every piece of equipment in the same place on the bench every time. If you must search for something on the bench, you'll lose focus and perhaps lose your condition.
4. During your practice days, establish a GOOD zero in calm, "no wind" conditions. Record the windage and elevation settings on your scope so that you can always return to them. Having confidence in your zero is part of having confidence in your equipment.
5. Arrive at the match early. Put out your flags and study them for at least ten minutes before the match starts. Also study other nearby flags, particularly those upwind of you. They can warn you of impending changes before the changes get to your flags. Identify two to four wind conditions that you like. Those conditions must last long enough to be shootable. (Many "good" conditions don't last long enough or come around often enough to be shootable.) One of your conditions should be the prevailing condition, even if it doesn't seem good. If it's the prevailing condition, you may be forced to shoot in it whether you like it or not. You might as well be prepared to do so.
6. Always set a timer so that you can quickly tell how much time you have left in the match. If you don't know, you'll naturally worry about it and rush your shots. (And your worry will distract you so that you can't focus as well.) Use your timer in practice just as you would in a match.
7. When the match starts, shoot enough sighters to be confident that you know the holdoff for each of your conditions.
8. Don't adjust your scope unless the wind is so bad that you would need to hold clear off the target. If the wind is bad, it is probably also switching often enough that you will need to shoot in several conditions. If you adjust your scope, it's too easy to get lost in sight adjustments. It's much simpler to keep your "no wind" zero and just hold off. Keeping your zero also makes it easier to learn from each shot. If you are adjusting your scope, it's very difficult to learn what the wind is really doing to you. If you absolutely must adjust your scope, record your "no wind" zero settings so that you can return to them. Yeah, I know that you could aim more precisely if you aimed at the center of the bull. But, this isn't a trigger pulling contest in calm conditions. This is a fight for survival in bad conditions.
9. Select conditions when all of your wind flags read approximately the same. At least, all of them should point in generally the same direction even if they don't read the same speed. Avoid shooting when some of the flags read wind directions that are opposite of other flags.
10. Be patient. Wait for your conditions. If they don't come back in a reasonable time, go back to your sighters and shoot the new PREVAILING condition. Record that condition in your book. Then go back to the record targets.

Make these steps habitual and your shooting should improve significantly.

Most of what I've said above is self explanatory. The internet contains several visual aids that purport to display the effect of various wind conditions on point of impact. They often show 10 o'clock to 4 o'clock stringing as the wind direction varies around the clock. Those visual aids may be theoretical approximations. But, that's not what really happens at any of the ranges I frequent. The generic visual aids certainly aren't precise enough to rely on during a match. The terrain of the range and the actual variances in the wind make it essential to know much more precisely what effect the wind is having on your point of impact.

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Early on in this article, I mentioned that rimfire benchrest was particularly affected by the wind due to the poor ballistic coefficient of the rimfire projectile. In addition, the rules of rimfire benchrest make the wind much more of a factor. In centerfire benchrest only five shots are fired per match. It's relatively easy to get five shots off in one, or at most, two wind conditions. However, rimfire bench rules require firing twenty five shots; and each shot must be fired at a different bull. It's practically impossible to shoot that many shots without encountering three, four, or more wind conditions.

When I started shooting rimfire benchrest, I watched my flags and tried to memorize their correlation to my point of impact on my sighter targets. That worked fairly well when the wind was steady in strength and direction. But, that has actually happened only once or twice in my shooting career. I found that I needed to be prepared to shoot at least three to four wind conditions. And, I'm senile. I simply couldn't remember exactly where to hold for each condition. In addition, I had a psychological problem. I found it difficult to hold off far enough. If I needed to hold in the middle of the 8 ring, I'd only hold on the edge of the 8/9. Consequently, too many of my shots got blown downwind out of the 10. I needed the confidence to be bold in my hold-offs.

Very seldom will all of your wind flags read the same angle and speed. So, you'll need to do a little quick mental averaging. That's where experience comes in. You should be able to pick conditions where all of the flags are pointing in reasonably the same direction. At all costs, avoid conditions where some flags are pointing left and others are pointing right. And be very wary of "calms". I don't believe that there is any such thing as a calm. A calm is merely a switch in progress. Calms give me mysterious highs and lows.

I never assume that today's point of impact will be the same as yesterdays even if the wind flags are reading the same. Today's data is only good for today. Seemingly identical wind conditions on different days can give different points of impact.

In this short article, I've only been able to give you a quick summary of shooting in the wind. You'll find much more in-depth coverage in books such as Precision Shooting's "The Benchrest Shooting Primer", Mike Ratigan's "Extreme Rifle Accuracy" and back issues of Precision Shooting. But, if you're a rimfire shooter, remember that you'll need to adapt the centerfire tactics to suit your game.

Much of what I've said may not be new to you. Much of it is simply common sense. But do you really practice it? Can you remain emotionally detached from the effects of weather on your scores? Do you have an effective game plan for shooting in bad conditions? Do you have a system for recalling up to four wind conditions? Can you honestly say that you consider the wind an advantage to you because it's a disadvantage to your competition? Is the wind your friend because it is the enemy of your enemy?

If so, you'll beat a lot of good "trigger pullers" when the conditions get ugly!  
Just shoot your best. Don't worry about the rest.

On the internet, you can find "wind rose diagrams" that show the theoretical effect on POI for various wind directions. Those wind roses are somewhat reasonable for steady state, laminar flow wind conditions. Unfortunately, steady state, laminar flow conditions are about as common as unicorns.

The reality is that you need to correlate the flag conditions that you see on that particular range and that particular day with the consequent points of impact of your bullets on your targets. (That's why they put sighter bulls on the targets.) And you need to memorize those flag conditions and resultant POIs so that you can adjust your POAs for those conditions when you go to your record bulls. Don't worry about where the wind is "supposed" to push the bullets. Just shoot sighters and see where the wind is "actually" pushing the bullets. (On a different day or a different range, the same flag conditions may result in significantly different POIs.)

I try to put out my flags and study them for at least ten minutes before the match starts. Also I study other nearby flags, particularly those upwind of me. They can warn me of impending changes before the changes get to my flags. I identify two or three wind conditions that I like. Those conditions must last long enough to be shootable. (Many "good" conditions don't last long enough or come around often enough to be shootable.) One of my conditions is the "prevailing" condition, even if it doesn't seem good. If it's the prevailing condition, I may be forced to shoot in it whether I like it or not.

I try to select conditions when all of my wind flags read approximately the same. At least, all of them should point in generally the same direction even if they don't read the same speed. I avoid shooting when some of the flags read wind directions that are opposite of other flags.

When the relay starts, I shoot enough sighters in my chosen conditions to determine where those conditions are causing my bullets to impact. (Yeah, it's a memorization exercise. Those of us who have reached the age of senility struggle, but that's the only way to shoot respectable scores.)

"CHASERS" VS "WAITERS" --- There are two styles of shooters -- those who "chase conditions" and those who "wait for conditions". Shooters who chase conditions tend to shoot at a fairly constant rate. They guess the appropriate point of aim for whatever condition exists at the time they are ready to shoot. Shooters who wait for conditions use their sighters to select two three conditions that they want to shoot. Then they wait for those conditions during the match. They tend to shoot far more sporadically than those who chase conditions. Admittedly, waiting for your condition to return, while your timer counts down, can be hard on the nerves. But, in my experience, chasing conditions results in far lower scores than waiting for conditions. I wait!

I try to be patient. I wait for my conditions. If they don't come back in a reasonable time, I go back to my sighters and shoot the new PREVAILING condition. Then I go back to the record targets.

If the wind conditions are reasonably steady, you can look at the flags, then look through your scope, adjust the POA, and shoot. But, if the wind conditions change every few seconds, you may have to adjust your POA for a specific condition, watch your flags until that condition appears, and then pull the trigger without looking back through your scope. It's kind of scary to shoot without looking through the scope, but it can be necessary.

One other note: There is no such thing as a "calm". A "calm" is just a switch in progress. And, "calms" promote mirage which is never helpful to accuracy. I avoid shooting in calm conditions.

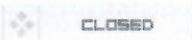
Hope this helps.

Ron Elbe

Hawkeye Wizard

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