



STATE REPRESENTATIVE

# KATHY BERNIER

October 14, 2015

## Assembly Committee on Natural Resources and Sporting Heritage – Testimony on Assembly Bill 291

Good afternoon, Chairman Ott and committee members. Thank you for scheduling AB 291 for this public hearing and allowing me time to present testimony in favor of the bill.

Deer hunting in Wisconsin is more than just an outdoor activity, it's a family tradition. This tradition, however, has too often left us women out in the cold, so to speak. This proposal will make Wisconsin the first state in the nation to allow the wearing of blaze pink in addition to the traditional blaze orange we are all accustomed to seeing around Thanksgiving.

This bill is not about fashion. Blaze pink is not only an attractive color; it's a color with high visibility. Blaze pink is a color that is more likely to be worn by women than by men. This might be more significant than it appears on the surface.

It's not primarily the color pink that appeals to women, but the fit that will undoubtedly accompany the new clothing lines. There is blaze orange gear designed for women, but it has a much higher price and is difficult to find. Too many women end up wearing men's clothing to save a few dollars. As a frugal person and an avid hunter, I can tell you that neither option is appealing. By authorizing the use of blaze pink hunting gear, manufacturers can design clothing specifically for women. This will undoubtedly bring the cost down and will create an option for those who prefer the comfort of appropriate gear while we stake out our spots in the woods.

I've spent a few hours in a tree stand with other women hunters, and I can tell you that blaze pink designed and sized for women sends the message that women are valued members of this proud Wisconsin tradition. We have been seeing a lot of pink on the football field this October, and I think that it is high time to see blaze pink in November as well.

Again, thank you Mr. Chairman and committee members for your interest in this bill and for holding this hearing. I am happy to answer any questions you may have.

(608) 266-9172  
Toll-Free: (888) 534-0068  
Fax: (608) 282-3668  
Home: (715) 720-0326

P.O. Box 8952 • Madison, WI 53708-8952  
Rep.Bernier@legis.wi.gov



## SENATOR JANET BEWLEY

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### WISCONSIN STATE SENATE

ASSEMBLY COMMITTEE ON NATURAL RESOURCES AND SPORTING HERITAGE

PUBLIC HEARING ON ASSEMBLY BILL 291

OCTOBER 14, 2015

Chairman Ott and members, thank you for the opportunity to submit testimony in support of AB 291. This bill would provide an option for all Wisconsin hunters to meet safety requirements with another color that research indicates may be even more visible to other hunters and at the same time less visible to deer than blaze orange.

I'm very happy to see your committee taking up this legislation, which builds on highly-respected faculty research at our state university. I was thrilled to have the chance to visit Dr. Sarmadi in his lab this summer to discuss the proposal and was impressed by his display of the potential advantages of blaze pink as an option.

Dr. Sarmadi demonstrated that blaze or fluorescent pink can in many cases be seen more easily by other hunters than our traditional blaze or fluorescent orange, especially when the fall colors include orange. At the same time, pink is less visible to deer.

I'm also happy to see this bill come up at a time our focus can be on the science and on the option this would create. As we know, a lot of the initial press attention to AB 291 focused on pink as a way to attract and keep more women involved in hunting. While increasing interest in hunting is a laudable goal, it is not the reason behind the bill.

I signed on to this bill because I'm convinced this is a viable option for all hunters in my part of the state and across Wisconsin. I support blaze or fluorescent pink as an option for any hunter seeking the advantage to be seen better by other hunters and less well by deer.

Much as Wisconsin hunters have moved over time from traditionally wearing red to the far more visible and safer blaze orange, this new option would build on advanced knowledge of visibility to both humans and deer. Thank you again for your consideration of this bill and I urge the committee to give both Wisconsin sportsmen & women this option.



**25th Senate District**

State Capitol: P.O. Box 7882, Madison, WI 53707-7882 ★ E-mail: [sen.bewley@legis.wi.gov](mailto:sen.bewley@legis.wi.gov)  
Web: <http://bewley.senate.wi.gov> ★ (608) 266-3510 ★ Toll-free: (800) 469-6562









## **SUMMARY DONE BY MAJID SARMADI, PH.D.**

October 14, 2015

The first and most important point is that no color or outfit can bring hunting accidents to zero. Our aim is to reduce them as much as possible. Blaze orange is required for hunting in many states but it is not popular with some hunters. Therefore, this study was performed to provide alternative(s) that are as safe as blaze orange, yet provide more choices to hunters.

### **Why Deer Spot Hunters**

#### **Detect Movement:**

Deer have an amazing ability to detect movement. A deer's eyes can detect even the slightest hint of movement.

#### **Human Scent:**

Deer, like dogs, have an excellent capability to detect scents. Their nose can be anywhere from 500 to 1,000 times more acute than a human's. Hunters should avoid scented detergents for washing their clothing.

#### **Deer Hearing:**

Deer hearing isn't much better than that of humans. However, deer ears are small satellite dishes that tip back and forth and roll around to pick up, sort and lock onto various sounds. Therefore, hunters should avoid making noise.

#### **Color of Clothing:**

Deer eyes, like the humans', have photo sensitive cells called Rod and Cone. Cone cells help see fine details and colors, and work best in bright light conditions. Rod cells help see movement and broad details, and work best in low-light conditions.

The human eye has three different types of cones (red, green and blue) but deer have only two (blue and green). Therefore, deer are dichromatic animals. Research at the University of Georgia indicates that deer can detect only greens, blues, yellows and UV. In general, humans and many daylight animals tend to have more cones, whereas animals who shun daylight typically have more rods. Deer have a much higher density of rods than humans do.

#### **UV Effect:**

A deer's ability to detect UV light is better than humans. Most detergents have brighteners in them that emit UV as well as visible light. Therefore, hunters should use a detergent that doesn't have these additives.

## SUMMARY DONE BY MAJID SARMADI, PH.D.

### **This research and its conclusion:**

It is well established that the visibility of objects (i.e. hunting clothing) depends on many factors including the amount of light that scatters from the objects and their color contrast with the surroundings. This study has used spectrophotometer to measure and analyze the amount of light scattered (reflected) from several blaze orange hunting hats and compared them with blaze pink colors. It has also investigated the color contrasts with green and orange (the colors most found in the woods) under different light sources.

It is well known that blaze orange provides a very good contrast in the wooded areas in the spring and summer. However, when visually compared to the orange colors found in the fall leaves, blaze orange was harder to detect than the pink colors that were tested. The pink colors provided a better color contrast. Our spectrometric analysis indicated that the blaze pink that was tested had similar visibility to most blaze orange hats and was even better than a couple of them. Therefore, based on this small study, it can be concluded that the blaze pink we tested were as safe as the "Blaze Orange" hunting hats.

Although this was a preliminary study, the results were very significant. Therefore, it is believed that a more in-depth study will result in very similar conclusions. It is also important to remember that the effect of color in spotting hunters by deer is far less significant than the effect of the hunter's scent, movement, detergents used, and noise.

Majid Sarmadi, Ph.D.

Rothermel Bascom Professor, Textile Science

Design Studies Department, School of Human Ecology

Nelson Institute for Environmental Studies, Professor

Materials Science Graduate Program, Professor

UW-Madison

Dept. Design Studies

Room 3214 Nancy Nicholas Hall

1300 Linden Drive

Madison WI 53706-1524

Tel 608-262-7492 - Fax 608-265-5099

majidsar@wisc.edu