

Goaltending Quick Hit #9 – Efficient Puck Tracking

Puck tracking is a two part term pertaining to not only visual attachment/tracking of the puck as it moves around the rink, including shots on net, as well as actually physically moving with the puck in a manner where the goalie is able stay in proper position depending on the situation at hand.

Efficient puck tracking starts with efficient vision habits. First, the goalie must have good vision either naturally or with the help of an optometrist; if a goalie has vision problems puck tracking is very problematic. Once good vision is established the goaltender must be able to put that vision at work through gaze control, fixation and the establishment of the quiet eye in goaltending. Gaze control is "the process of directing the gaze to objects or events within a scene in real time..." Fixation "occurs when the gaze is held on an object or location within 3 degrees of visual angle (about the width of a thumb up held with the arm fully extended) for 100 miliseconds or longer. The quiet eye refers to "final fixation or tracking gaze that is located on a specific object or location." It is important to understand that the quiet eye of elite athletes is both earlier and longer than athletes with a lower skill level. Keeping this in mind the goalie must be able to keep their eyes fixated on the puck as this gives us the most information about the where, when, what and how when facing a shot. Essentially the goalie must do what is necessary to make it easier to fixate on the puck while maintaining the ability to get into earlier, and maintain longer, the quiet eye phase.



Since it is essential for the goaltender to fixate and maintain a quiet eye on the puck earlier and longer this is part of the reason why we are so adamant that goalies must get fully shot ready and in position as the opposition is about to get to the redline up until the puck leaves the goaltender's defensive zone. This allows the goalie time to settle their body into their stance so that they can do their quick scans of the ice earlier in order to allow the goalie to focus on the puck as it becomes a direct scoring threat; which starts just inside the red line. Many goaltenders have several stages to their stances as the puck moves in closer. The use of several stages of the basic stance flies in the face of sports vision research where the eyes must be completely focused on the puck earlier and longer in an attack sequence because the constant up and down motion of the eyes causes problems for maintaining fixation. Now, there are stance adjustments dependent on some game situations and save selections, but the key is to minimize the amount of bobbing of the eyes. Going from nearly completely upright, then into a lower stance and into a save selction, just prior to shot release, will result in shorter fixation and quiet eye times before, during and after the shot is taken which equals goals against. Think of the best NHL goaltenders and although they do adjust width and depth of stance at different times they all work best within the confines of their shot ready stance as much as possible (e.g. Kipprusoff, Quick, Miller, Rinne, etc.) The simplest way to maintain fixation and quiet eye is to establish the full shot ready basic stance and maintain that stance while using efficient goalie specific skating to move around the zone.

After the vision habits are understood and established the next most important aspect of puck tracking is through efficient and effective goaltender specific skating skills. If a goaltender is unable to skate and move on their feet and knees then they will not be able to stay on line/angle with the puck while maintaining squareness as well. If a goaltender is a choppy or poor skater they will be behind the play or move in a way that is harder for establishing and maintaining a quiet eye early enough and for long enough prior to, during and after pass or shot release because the head and shoulders and eyes will bob up and down throughout the movement. The body must be ready to at least keep up with the eyes as much as possible. Essentially, goaltenders must realize the importance of their basic stance and smoothly maintaining that basic stance throughout all movements so as to give their eyes a chance to operate effectively and efficiently while tracking the puck visually and physically throughout a game.

Vickers, Joan N. (2007) *Perception, Cognition and Decision Training: The Quiet Eye in Action*. Human Kinetics: Windsor, ON