COACH'S PARKER BOHN III ON HAND POSITION OUT, NOT UP

# STENCY

### PLUS:

**Bowling Clinic:** Bill Spigner on the toe-heel slide step

Tim Mack: From the bench to the world stage

### Dana Miller-Mackie:

The match I'll never forget



You've thrown the occasional perfect shot—here are Jeri Edwards' tips for learning how to repeat those moments



### Learning the Toe-Heel

A special treat: Bill's still answering the questions, but 1999 U.S. Open champion Kim Adler steps in as his stunt double in this issue's "Bowling Clinic."

### I have two problems. I don't slide at the release of the ball, and my arm sometimes flies up like a broken wing. What can I do?

Your inability to slide is a result of your footwork on your last step. On the last step, the toe of the sliding foot is raised into the air and the heel of the foot hits the floor first. This heel-totoe step is similar to your other steps, but it isn't recommended for the last step. The best step sequence is heel-toe for all steps, then toe-heel for the last step, which will allow you to slide. Also, each step should be no more than two inches off the floor.

Stepping heel-to-toe when you slide can lead to inconsistencies with the shot. First of all, when the toe is raised up, the sliding leg initially straightens out. Second, the spine angle leans back, with the upper body becoming perpendicular to the floor. That keeps your body weight back over your pivot step leg—the leg that executes the step just before your slide—and makes it more difficult to get the upper body up over the sliding leg for leverage and balance.

In order to slide properly, do the following. directly over your toe. As you move forward into your slide, try to keep your upper body over the sliding leg in the same position it was during the pivot step. Although your body won't stay the slide, it's important to deliberately think about it this way. The pivot step helps push the

Need some help with your game? Bill Spigner

welcomes questions from readers. Mail them to:

Bowling Clinic, Bowling Digest, 990 Grove

Street, Evanston, IL 60201. (Due to the volume

of letters, no personal replies will be made.)

1a



On the pivot step, when your weight is directly over your planted foot, your sliding leg will just start to pass that foot [2b]. Both knées are bent and your spine angle is leaning slightly forward, with your chin slightly in front of the toe of your planted foot and the knee of the pivot step leg directly above the sliding leg at the beginning of

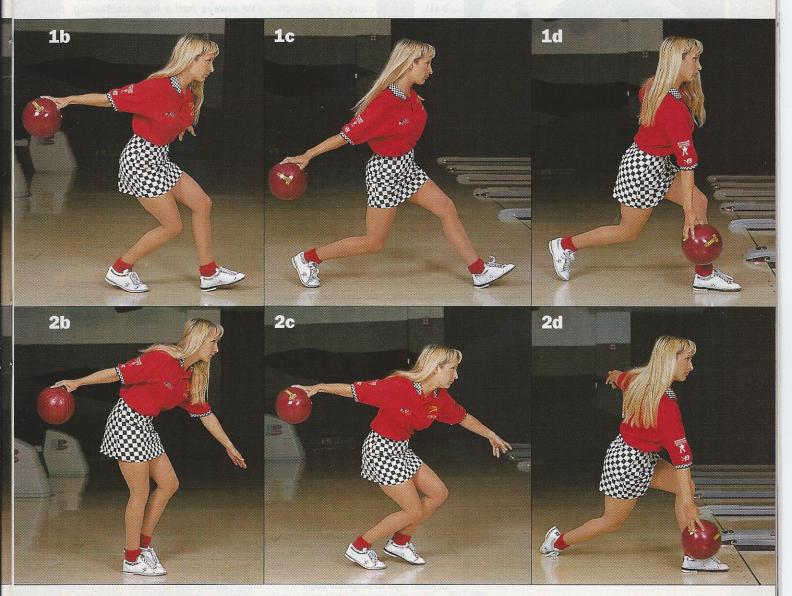
upper body forward over the sliding leg and foot [2c]. With the upper body over the sliding leg, it will be easier for you to concentrate on your toe hitting the floor first and thus being able to slide.

Some bowlers have used the heel-toe, no-slide method with great success. The problem is, it requires a lot of muscle to control the ball, and it limits what you can do with your release. When the upper body is perpendicular to the floor when your foot lands flat on the floor, it has to lean forward after the foot and legs stop in order



Bowling By BILL SPIGNER

## Step Helps You Slide



Touching down on your heel as you land on your sliding foot [1b] straightens your leg and your spine [1c], causing you to approach the foul line too upright [1d]. Keeping your toe down as your sliding leg crosses your pivot leg [2b] keeps your body weight centered above your feet [2c] and allows you to move into your slide with momentum [2d].

to get the ball in the right position for release. Basically, your whole upper body is forced to move to a forward-tilted position in a very short time.

Trying to change from the heel-toe last step to a toe-heel slide will take a lot of concentration. When you're learning the change, you'll have to forget about the ball totally—let your arm swing through with no effort, and don't do anything to the ball or worry about where the ball is going. All your focus will have to be on the upper-body position and the foot. Do this during practice, of course; trying to do it in competition will only lead to frustration.

My experience has been that bowlers who have used the no-slide last step for many years have a very difficult time changing that step, because it changes all of your feel at a most critical time: just before you release the ball. If someone were in the developmental stages of their game, I would recommend work-



To eliminate the "chicken wing," focus on not overrotating your shoulders and keeping your forearm square to your target.

ing seriously on this step, because it will make it easier to improve your game and bowl better down the line. Even for those of you who can't change—and it's OK that you can't—learning more about the mechanics of the last step will help you improve your body position when you release the ball. And whatever you

do, I highly recommend that you videotape yourself to see what's going on.

Your "chicken wing" problem is caused by turning the ball early. When you turn the ball early your forearm is outside the ball, which causes a loss of leverage. When you start to lift the arm with the arm already rotated, the elbow tries to help lift the ball, but it's too late—the wrist flies around the ball. The ball ends up sliding too far and has very little power.

To remedy this, concentrate on two things. First of all, your shoulders—if your shoulders rotate a little early to square up to your target line, this can cause your arm to rotate the hand early. The shoulders have a big influence on the turn you apply to the ball. Second, visualize your forearm facing toward your target as long as possible. The combination of the shoulders and keeping your forearm square to your target will go a long way toward keeping your hand behind the ball and getting rid of your chicken wing.

■ I recently had a bout with cancer and had a bone marrow transplant. I have since tried to bowl again, and I've had a hard time keeping the ball on the right side. I throw a 16-pound ball, and I know I'm not strong enough yet to keep my ball speed up on dry lanes. How should I deal with dry lanes? Should I go to a lighter ball?

It's great that you're back to bowling after your health problems. All of us at BOWLING DIGEST wish you the best.

I recommend that you drop down in weight, possibly to a 14-pound, high-RG resin ball. This will help you do two things: (1) The lighter ball will allow you to roll the ball at a much faster speed with less effort, which will allow you to stay stronger longer, and (2) with the lighter ball, you'll be able to put more action on

the ball with less effort. With more speed and more hand action, you'll bowl better. Today's balls are so good that using a lighter ball is the right thing to do for many bowlers.

■ I have a question on my backswing. I've always had a high backswing, but how high is appropriate? How can I keep my backswing at a consistent level and still keep my steady movements intact?

There really is no appropriate backswing height. The backswing needs to match up properly with three things. First is the coordinated timing of your swing and your legs. Is the swing in the right place in relationship to each step and the height of the swing? The second factor is speed of your steps. Is your backswing height right for the speed of your steps? And the third thing is whether your backswing height is right in relationship to the tilt of your spine and the rotation of your shoulders. These three factors—timing, speed of steps, and upper-body position-determine the best backswing height for an individual.

For example, Pete Weber has a very high backswing. He has early timing at the beginning of his approach, a lot of forward tilt of the spine, and his shoulders open about 160 degrees. Pete has slow-moving steps, though, which creates enough time for the swing to get high and the shoulders to rotate as much as they do. Now take U.S. Open champion Bob Learn. Bob has a much shorter swing than Pete and less shoulder rotation, but Bob has very fast-moving feet that allow the timing between his swing and his steps to work.

The key to your game is that its different elements match up correctly relative to your personal makeup, so you can deliver the ball consistently in a way that works with the playing environment. You need to know the mechanics of your game in order to make informed decisions on how to improve it. Personal improvement is a never-ending quest. Kim Adler, the 1999 Women's U.S. Open champion, is that type of athlete, with an insatiable appetite to learn. The more she knows, the more questions come up about what she can do next. •