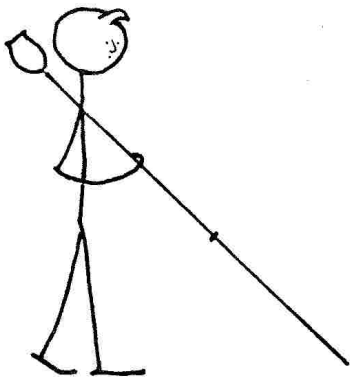


Common Mistakes

in

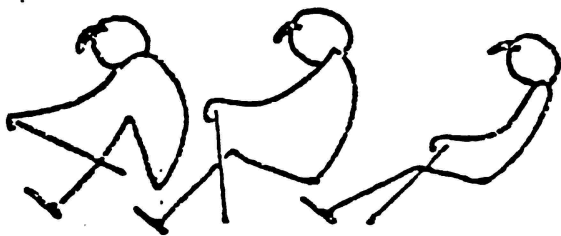
Rowers' Techniques and Remedies Therefore

Bill Mahoney, Originally Published in The Oarsman, March/April, 1978
(modifications by Chris Kafer, 2003, 2004)



IMPROPER POSTURE

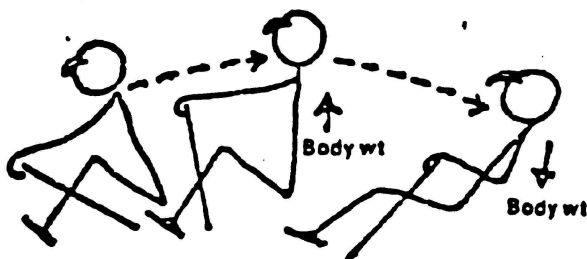
Many oarsmen row with improper posture in the boat. Most commonly, the error comes in rounding the back, which causes the shoulders to rise, the chest to sag, and the lower back to slump:



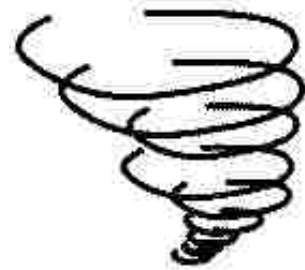
A bent back is a weak back. A bent back reduces the size of your lungs (not a good idea for racing). A bent back is a short back, and reduces your length (reach) at the catch.

SHOULDER LIFT

Many oarsmen either initiate their drive or place the blade into the water with a shoulder lift. The beginning move at the front stops is a raising up and back of the shoulders:

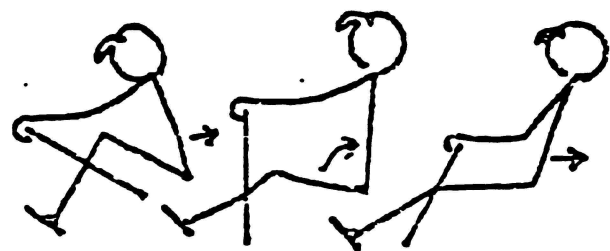


A shoulder lift causes the body weight to shift during the drive, forcing the boat down into the water at the finish, killing boat run. Shoulder lifters often have stiff arms, too much layback at the finish, slow legs and real tired backs, which compound the problem.



PROPER POSTURE

Try to keep your back as straight as possible without being stiff. Sit up tall- try to feel as though the handle is well below your ribs. Try to keep your chest full, but relaxed. Let the back have only one joint- **AT THE HIPS!**

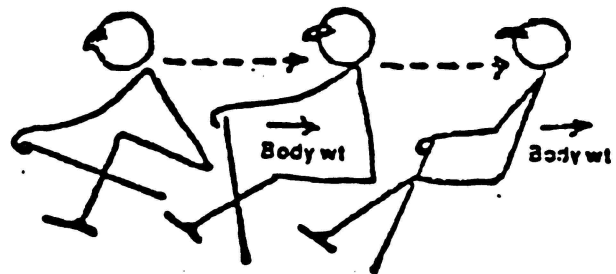


A straight back provides:

- 1) A better connection between back and legs
- 2) More room over the thighs and lap to feather
- 3) More room in the rib cage for lungs
- 4) A stable platform against which the arms can draw for a steadier finish

STEADY SHOULDERS

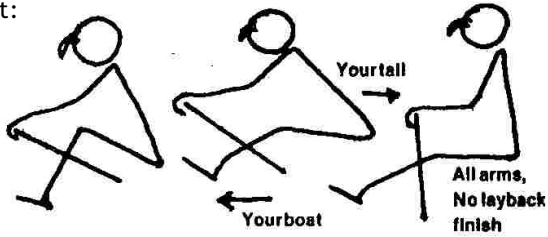
The blade should be inserted with just the hands and the boat should be picked up with the leg drive- therefore, try to hold the shoulders steady throughout the drive-make sure they are moving in a horizontal plane:



Steady shoulders primarily keep the body weight moving horizontally in the boat, which allows the boat to run. Steady shoulders also keep the legs strong and quick and prevent them from stalling

SHOOTING THE TAIL

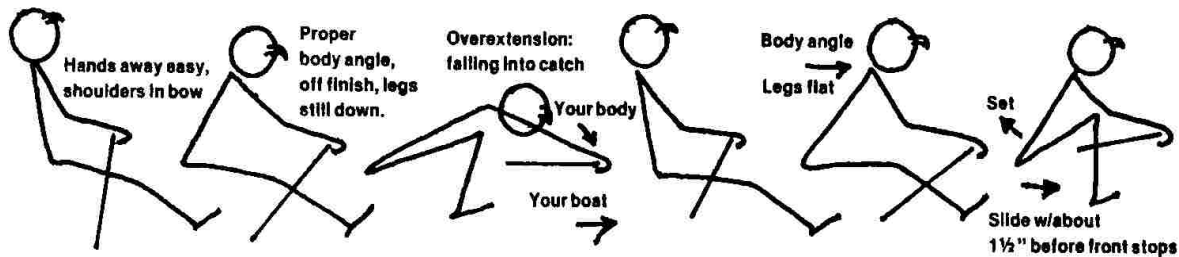
We stress leg drive, but leg drive is ineffective if the oarsman is weak in the lower back and kicks without holding against the legs in the lower back. The result of this is "shooting the tail", driving the legs without moving the boat:



Shooting the tail loses all the punch at the catch, since the oar handle does not move and you do, and the footboards (hence, the boat) receives a big backward push. This backward push kills the run, causing the boat to "check", or slow down or stop before each catch.

FALLING INTO THE CATCH

Oftentimes, crews tend to fall, or lunge, or drive into the catch. This means that just before the catch, the crew tries to get enough (or extra) reach by suddenly bending forward more and stretching the body and arms:



This malady leads to shooting the tail, since your overextended back can't hold effectively against the legs. The momentum into the stern from the lunge is hard to break, so your catch will be slow and your boat will probably have a severe check

FALLING INTO THE FINISH

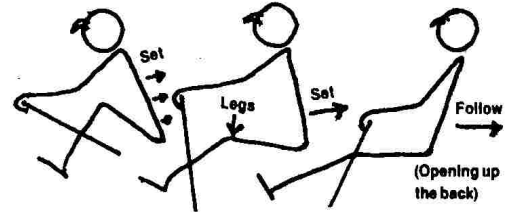
Some crews have a problem with too much layback. The crew can't pick the boat up quickly at the catch, so they try to send the boat out with a hard finish. Hard finishes tend to cause loss of body control and falling, or slumping, into the finish



excessive layback not only dumps your boat down into the water, and kills run, but it also makes it hard to row high cadence, makes your abdominal sore, and gives you less room in your lap to feather

PROPER CONNECTION

Try to be "set" against the legs in the lower back at the catch. The "set" should feel roughly as you would if you were doing cleans or dead lifts. By bracing the back vs. the legs, you can use the legs as the prime movers through the drive.



Try to feel the set in the lower back, beginning just above the hips. Make your back so strong and firm that you know that for every inch you drive on the slide, you move the oarhandle a corresponding inch, and you will always have a light, quick feel in your boat.

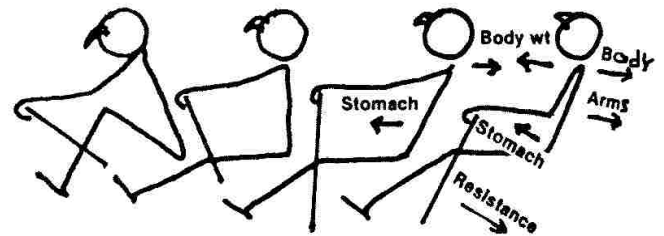
PROPER BODY CONTROL AT THE CATCH

This can be attained by: 1) recovering in proper sequence (hands away quickly, then lean forward from the hips getting body angle while legs are still down, then come easily up the slide); and 2) as you approach the catch, start to set in the lower back.

By angling from the finish position, you make it easier to get your body angle. By anticipating your set in the lower back, you stop the forward momentum of your slide, and can reverse direction easily and quickly (efficient transfer from recovery to drive at the catch)

PROPER BODY CONTROL AT THE FINISH

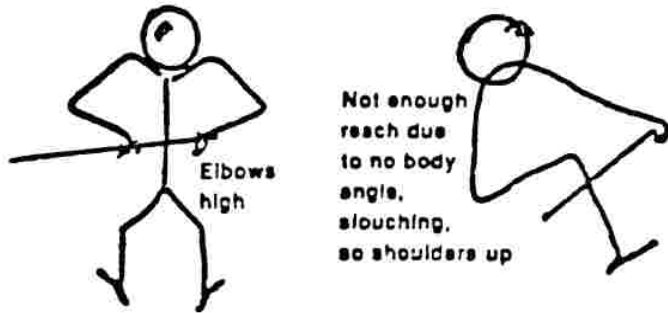
1) Open the back sharply and quickly just before the legs are used up (never more than 10-15° past perpendicular), and then catch the back when it is fully with the stomach muscles; and 2) draw with the arms against the oarhandle to help stomach muscles stop the body momentum into the bow.



It is most difficult, but most important to learn how to control your body at the finish. You will find that feathering the oar is far simpler when you are sitting perfectly still at the finish and you can do this only by catching your body with the stomach and saving the arms to help control the finish

SHRUGGED SHOULDERS

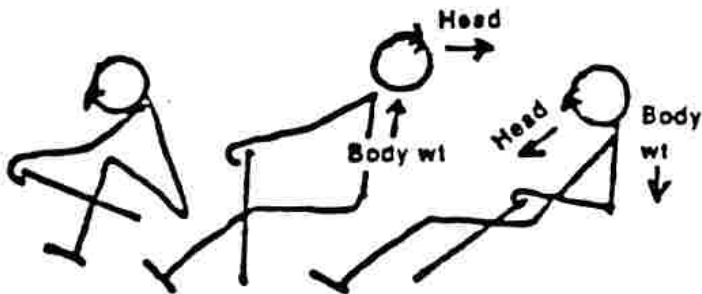
Many oarsmen row with their shoulders practically stuffed in their ears. They do this usually for two reasons: 1) They need to push the shoulders up and forward to get enough reach at the catch; and 2) they lift their elbows high to get the oar up where they can feather. These problems are often related to slouching, also



Shruggers are uptight oarsmen. Either they can't feather and are afraid they'll crab, or they don't recover correctly and have to lift up over their knees, or they can't follow the stroke and are afraid the coach will see it.

BOBBING HEAD AND SIGHTSEEING

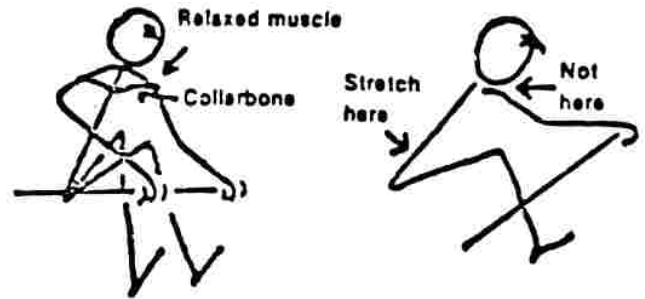
Most people's heads weigh 10-12 lbs. If you toss it up and down during the drive, again (like the shoulder lift) you hurt the run of the boat



Sightseers are people whose attention span are comparable to four-year-olds and must look out of the boat. They are also people who are never on time at the catch, who always rush their slide, and who crab out in tight races.

HOLDING YOURSELF UPRIGHT

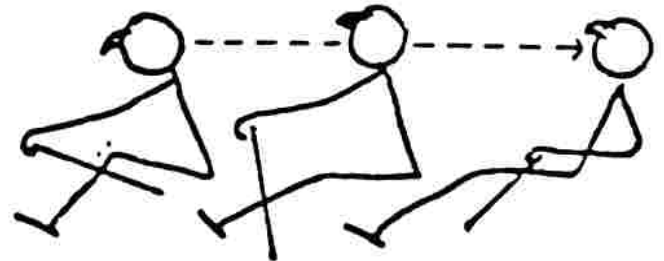
A stock phrase is "shoulders down, chest up." This means that the shoulders should be completely relaxed around the neck and collarbone while rowing. Often sitting a shade taller and firmer *from the lower back* will solve the problem. If you can't feather you have to read a little more and row a lot more.



The more you can relax and turn off muscles which aren't required for rowing, the more efficient your rowing will be.

THE HEAD (NOGGIN)

Try to keep the head moving in the same horizontal plane throughout the stroke cycle (like the shoulders). Try to keep relaxed in the jaws and face.



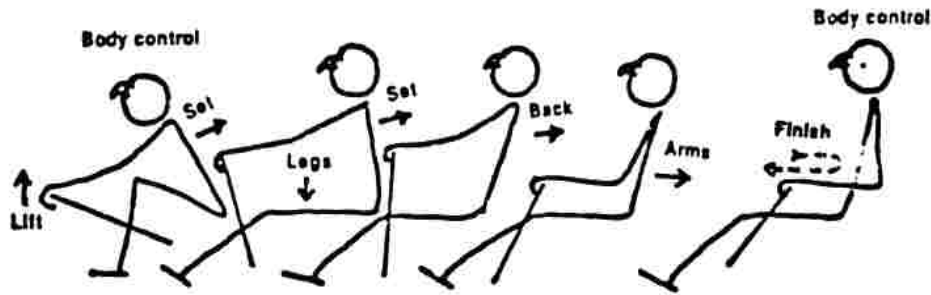
You must keep your eyes in your boat! The coxswain can tell you all you need to know. Preferably look at the back of the man in front of you, or stroke or seven's oarlock (don't watch their blade, you'll always be late). But crew is a *tactile* sport, and you will never be successful if you cannot *concentrate* and feel out the boat's motion and how your movement is relating to it.

THE IDEAL STROKE

Begins *as you approach* the front stops. The weight of the hands comes off the handle, the blade descends towards the water, the lower back sets, and the hands rise and proceed forward. Then the blade falls into the water and the legs stomp, driving against the *set* back.

Just before the legs finish, the back opens hard to 10° -15°. *Just before the back finishes* the arms start to draw, to finish out the stroke and to stop the body's momentum into the bow. The style is legs, back and arms, with heavy emphasis on the legs and back. It is a *sequence of moves*.

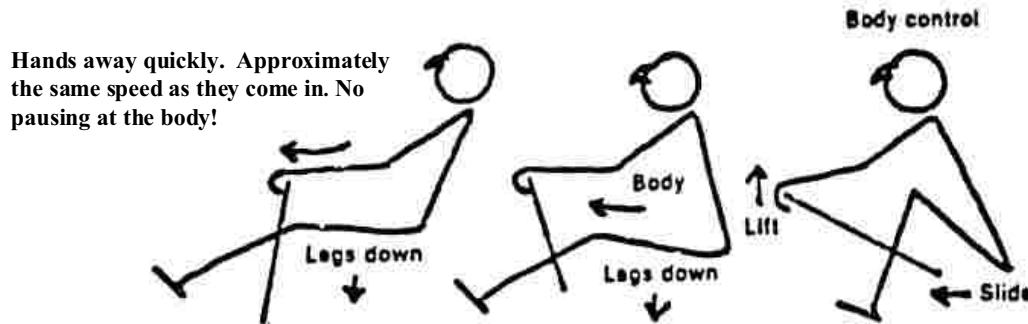
"Lift and set, catch, LEGS, BACK, arms."



THE IDEAL RECOVERY

This really begins when the arms draw level to or slightly past the body. By this time, the body should be still and the hands feather and press away quickly until the arms are loosely extended. Then the shoulders and upper body, which were riding at the finish position, rock forward *from the hips*, getting full body angle for the next catch. This is a smooth and continuous motion. The oar never stops moving.

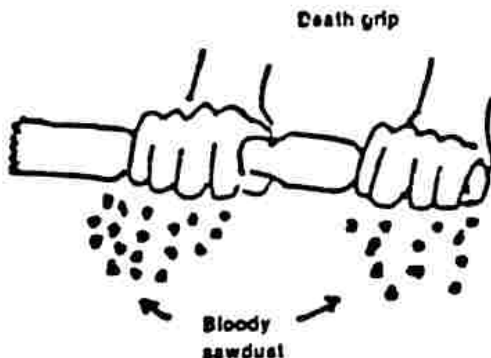
The legs then release and the slide rolls easily forward as the knees come up under the armpits. The recovery should be as slow and gentle as possible to maximize run and should *always take nearly twice as long as the drive* at low cadence. This ratio between quick drive and long recovery is called "swing".



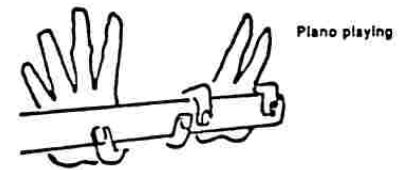
PART II. Hands and Bladework

IMPROPER GRIP

Very few oarsmen hold their oars correctly. Some clamp on so tightly (death grip) that you can see their knuckles turn white. Others hold the oar so loosely, and actually take their fingers off the handle at odd moments (piano playing).



Other problems include: hands too close together, hands too far apart, hands too far down the handle, hands not responding to brain, etc. etc.

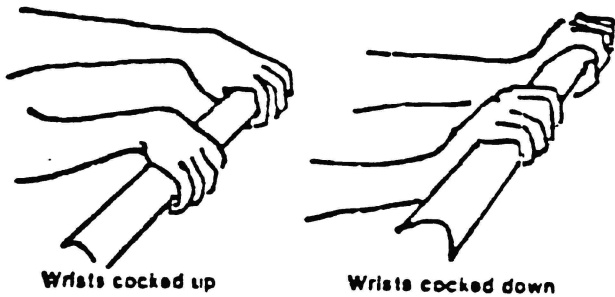


PROPER GRIP

- 1) The outside hand (left if you're port, right if you're starboard) should be at the end of the handle, pinky finger parallel to or overlapping the butt end.
- 2) The inside hand should be two widths of your hand (thumbs included) down the handle. In other words there's two hand-widths between your hands on the handle.
- 3) The oar should be held between the joint of the thumb and the face of the fingers. *At no time should the palm fully contact the oar handle.* If you have big palm blisters, you are holding the oar too tightly. If you have blisters on the span of your thumb, you are holding the oar too tightly.
- 4) The oar is held in the crook of the four fingers at the top of the palm. *Do not squeeze the handle when you drive.* Let the oar sit snugly up against the four fingers and keep the thumbs in loose contact with the handle.

WRIST COCKING

Incredibly, many oarsmen cannot understand why their forearms get tight, or why someone else's do not. The problem is called wrist cocking and it is simply driving with the back of the hand at an angle to the forearm.



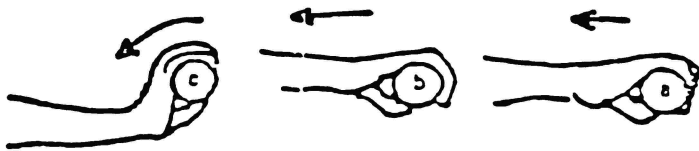
This habit invariably creates problems like:

- Squeezing the handle
- No room in lap to feather
- Feathering with both hands
- Tightness in arms and upper body

FEATHERING

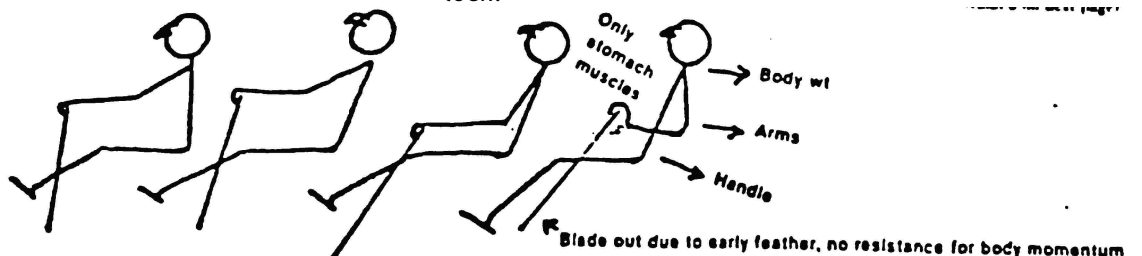
This is the most difficult aspect of rowing to learn. Many oarsmen row for years without doing it properly, some never get it right. The improper techniques are too various and unbelievable to portray here, but in general, problems stem from either:

1) *Quick jamming the wrist down* at the finish and trying to press away with the wrist tucked under the handle.



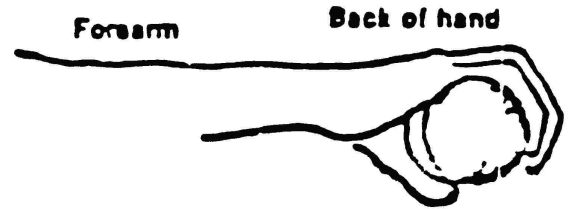
Wrist jams as handle comes toward the body, thumb squeezes handle. Results: no body control or relaxation at the finish, no room to press down to get the blade off the water, scraped thighs, tight forearms. Also impossible to reach for the catch carrying the wrist under the handle.

2) *Feathering the blade while still pulling* Any form of feathering while still pulling makes it difficult, if not impossible, to be doing any of the following: 1) balance the boat; 2) get the blade off the water; 3) get your body off the back stops and row at high cadence. Notice in the diagram how the handle level remains the same, only the wrist goes down. *You can't get the blade off the water that way.* Similarly, you can't get the handle away and your body back up the slide if you don't stop the handle and your body momentum



RELAXING THE WRISTS

Both the fingers and wrists must relax before relaxation can be achieved totally. Therefore, it is important to make sure that the wrists are not cocked. Check to see that the backs of your hands are parallel with the plane of your forearms.

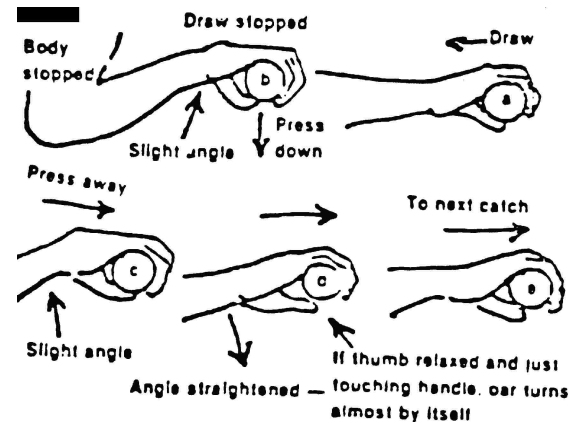


This should be the position for *both* hands. If you have to do something strange with your feathering hand, you don't yet know how to feather correctly. In the drawing, note that there is daylight showing between the palm and handle. That is how your hands *should* look.

FEATHERING PROPERLY

1) *You must attain body control at the finish first.* You must stop the momentum into the bow with the stomach and the draw of the handle, and give your hands a still platform to work off.

2) *Press down* first to get the blade out of the water. If you have stopped your momentum and the handle, all you need is a slight downward pressure and the handle will go *straight down*.

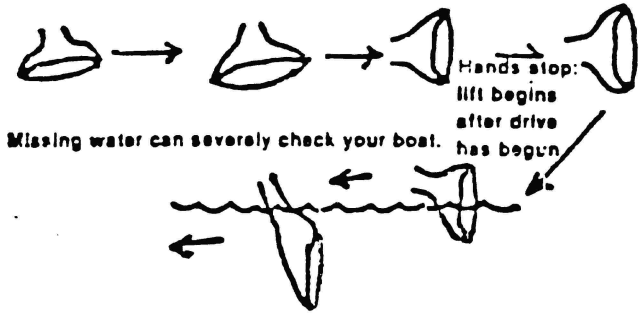


3) *Press away* as the lip of the blade clears the water. If you have drawn properly, there will be a slight bend in the wrist of your feathering hand. All you need to do is straighten out that bend and *let the thumb relax and rest loosely on the handle*. If the thumb is loose the straightening of the wrist will make the oar fall flat in the lock.

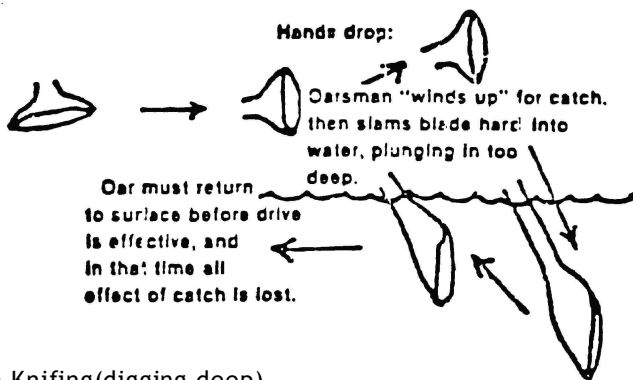
BAD CATCHES

Bad catches are usually why a crew is unsuccessful. *The catch is the most important part of the stroke!* Here are ways in which oarsmen butcher their catches:

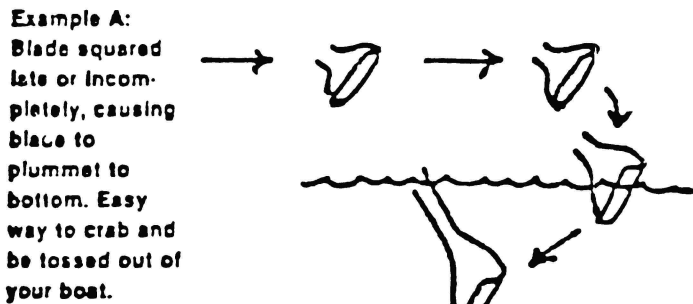
1) Missing water (rowing it in)



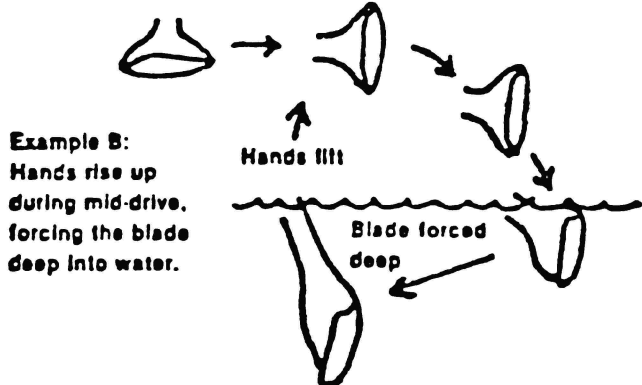
2) Chopping



3) Knifing (digging deep)



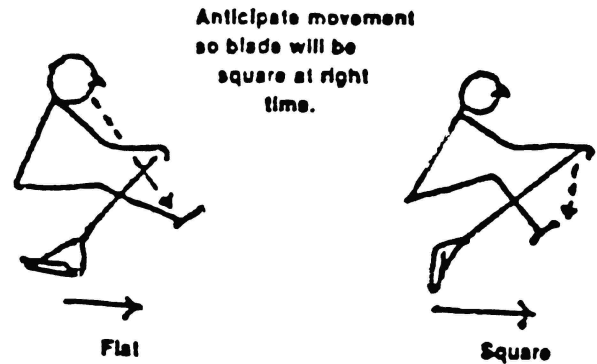
Knifing is an easy way to take a bath.



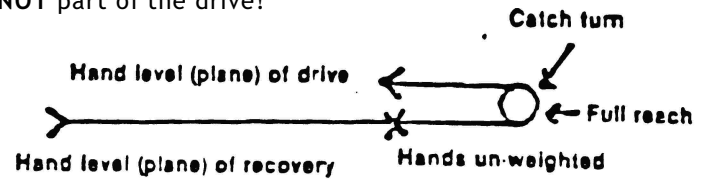
The catch is most difficult to learn, but it is the key to boat speed. A quick, hard catching crew will beat a mushy, slow crew anytime. As a strong, hard-charging line in football can dominate a game, hard catches can dominate a race

THE CATCH AND HOW TO DO IT

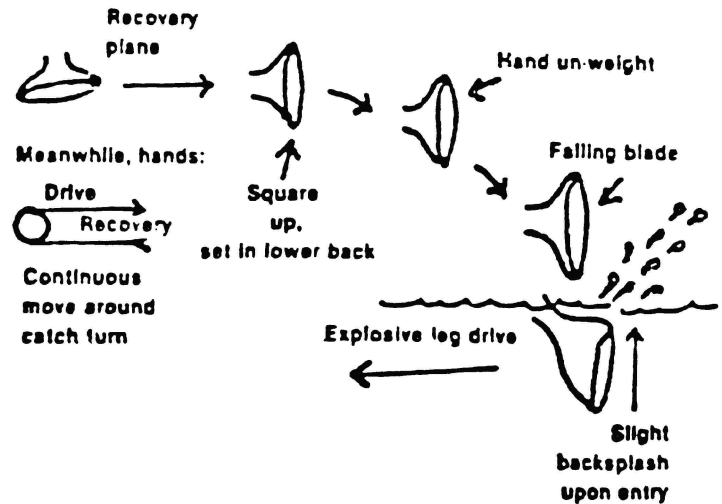
1) *It begins by squaring the blade properly.* When the handle is over the shins, the blade should be squaring (not before, not after). Getting the timing right requires *anticipation*. Blade should be fully squared by 3/4 slide.



2) *As you approach the front stops and full reach, begin to take the weight off your hands and allow the blade to fall into the water as you reach out.* Your hands should follow a small semi-circle around the catch turn, and should make the turn in a split second. The catch is part of the *recovery* NOT part of the drive!



3) If you begin the hand movement of the catch properly (before full reach), the blade will catch the water properly.



Remember, *gravity* will put the blade into the water faster than you will. Don't try to be quick and force the blade, just *anticipate* each move before it happens, be *relaxed* and the move will come along properly

When you feel the blade splash into the water, *immediately* explode with the legs and the *set back*. This will give you the quickness required for *real speed*.

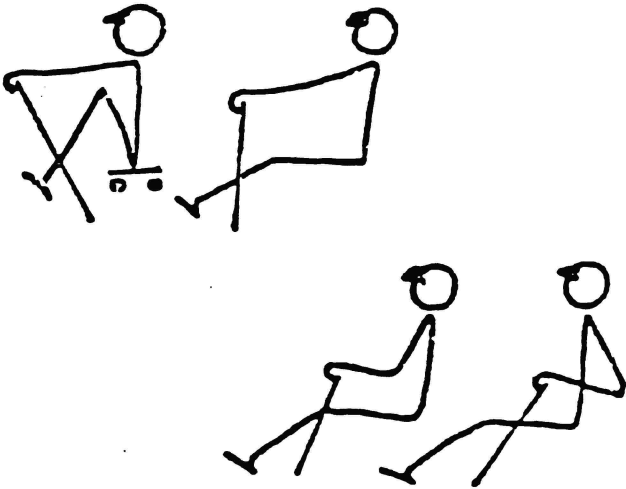
Part III: The Slide

ABUSING THE SLIDE

Many young oarsmen abuse the slide by hitting either the front or rear stops while rowing or by rushing the slide. These problems are simply remedied.

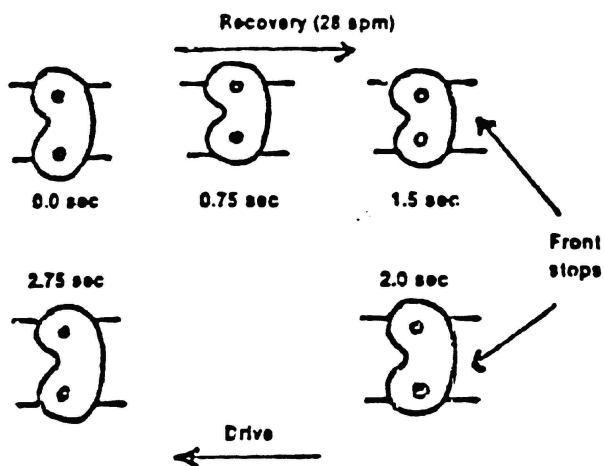
1) *Hitting the rear stops* means you need to move the footstretchers towards the stern

2) *Hitting the front stops* means you may need to move your footstretcheers toward the bow. It may also mean that you are without body control at the catch, or are rowing without body angle

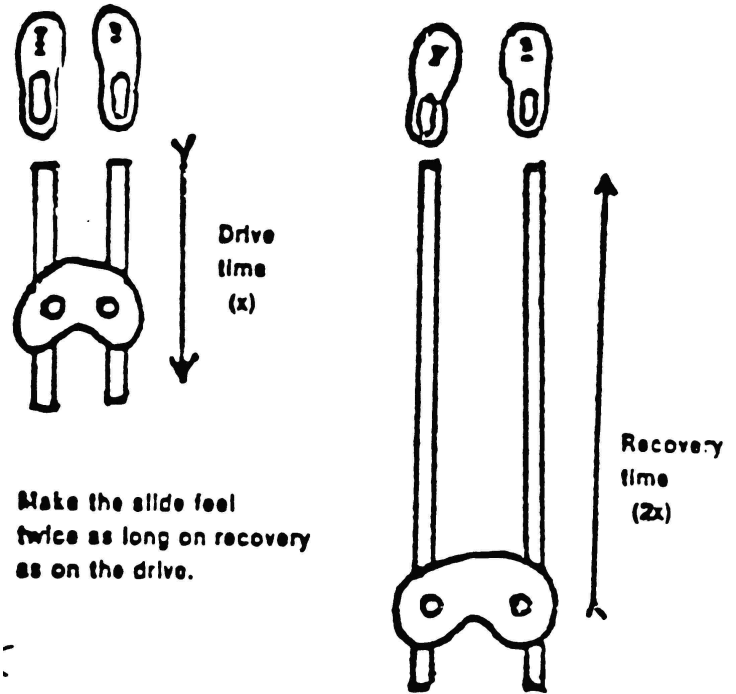


MORE SLIDE ABUSE

Just as a lot of oarsmen allow their hands to stop at the catch and get slow and in trouble, so do oarsmen allow their slides to stop at the catch (front stops).



The diagram above shows how the slide can stop at the front stops. The time in seconds represents elapsed time of the stroke. Here the seat stays at the catch for 0.5 seconds. For that length of time your weight is in the stern slowing the boat.

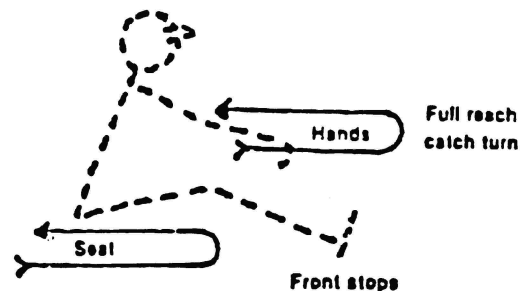


3) *Rushing the slide:*

Rushing is the easiest way to kill the speed of your boat; it means that you come back up the slide in less time than it took you to drive through the water. At low cadence (22-28 spm) the recovery should take 1.5-2.0 times the amount of time it took to drive. Make the recovery slide long, slow, relaxed and feel the wheels turn.

THE QUICK, LIGHT SLIDE

Just as the hands should swing around the catch turn without stopping, so should the seat roll into and out of the catch without stopping. Here is a different diagram to show how the slide and hands should coordinate for a light



If both the hands and the seat reverse direction simultaneously, and the blade is solidly buried, you will be moving the boat.

PART IV: RACING AND OARSMANSHIP

TACTICAL ERRORS IN RACING

Racing is a simple matter, really. You get ahead and stay ahead until the race is over. But some crews make classical errors which are explained here:

- 1) *Fly and Die*- You blast out to a big lead in the first 500M rowing 40 spm, never settle, never realize how high you're rowing, and then break by 1000M as your opponent steams by rowing 33½.
- 2) *Tortoise*- Basically, you become afraid to hurt early, take the boat off the line too tentatively, and your opponent has an insurmountable lead by 500M.
- 3) *Scrambling*- You're in the race OK, but you're 1 to 3 strokes higher than your opponent, and the boat isn't really together and swinging. You will probably lose in the last minute of the race.
- 4) *Sitting on a small lead*- You get out by 6 seats or so on your opponent and just sit there, hoping to hang on until the finish. Meanwhile, your opponent sees you going nowhere, and gains confidence the longer you sit there. This is similar to:
- 5) *Opening the door*- Allowing an inferior opponent to get a lead and keep it long enough to believe they can beat you. Then they get tough as you go down the course.
- 6) *Breaking*- Allowing a crew to beat you at once with a single decisive move. You race even for 1000M, then your opponent takes a 20 and moves four seats before you respond, and then your response is scrambled and not together because you got rattled.

RACING TO WIN

Here are some general principles which will, if you can put them into practice, win you some races:

- 1) *Execute your race plan*. Particularly at the start, don't worry about your opponent; pay attention to executing your plan perfectly (right cadence, right moves, etc.) Get it going well, *then bust it!*
- 2) *Be aggressive but under control*. We call it violence in a bottle; you should be really keyed up and really bustin' it in a race, but not unconscious of what you are doing, not losing thought or concentration. Don't let the race happen to you, make it happen. This will take care of fly and die, tortoise and scrambling.
- 3) *Move on your opponent*. Once you start moving, keep moving. Don't sit on any lead - **kill your opponent**. If you are behind, **do something**-bring the slide under control, take 20, stop them, stop them cold and come right back at them!
Never stop moving, ahead or behind. A big move from behind can break a crew who is ahead of you, but scrambling. You never know how fragile their lead may be.
- 4) If an inferior opponent is leading you, *make sure he is paying a terrible price. Make him hurt for every seat, every inch. If you lose make sure they beat your best.*
- 5) *Winning is a habit. Make it yours*. It is a reasonable goal to not lose a piece, even a single 20, all year long. Do you have that kind of pride? Do you care enough? All real champions do. It doesn't take that much more to win, but it does take those corny virtues - Courage, perseverance, pride, strength and *heart*. Are you that kind of person? Find out!!

