These Bike Computers Will Make You Faster, Better

Overcome Stress with Cycling

Meet the Fastest Bike in the World

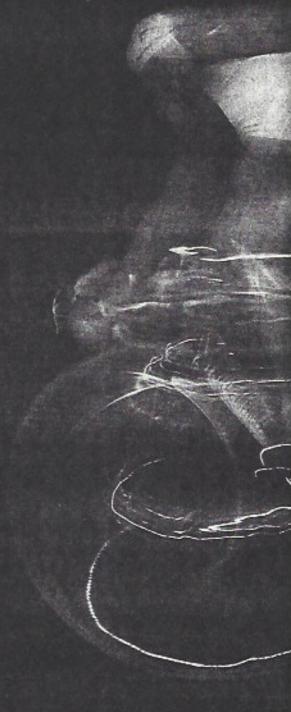


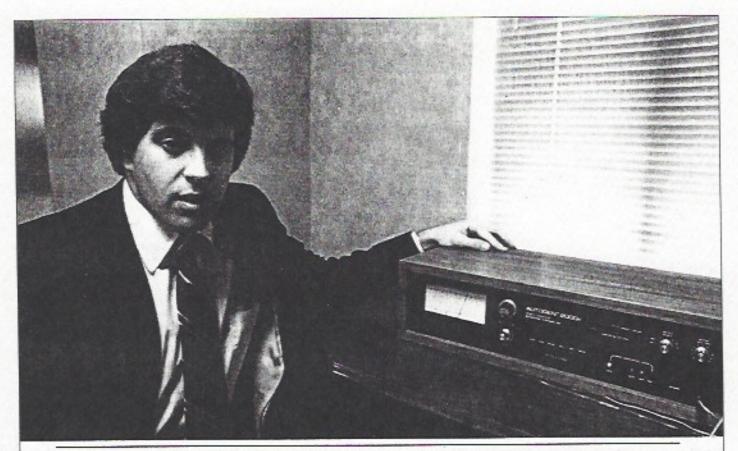


# FITNESS Mind Over Matter

The Mental Side of Winning

Tracy DeCrosta





Dr. Andrew Jacobs, a sports psychology consultant for the U.S. Cycling Team, sometimes uses biofeedback equipment to measure stress. Fred Smith Associates photo.

Although Pat McDonough was only 17 when he traveled to the 1979 Junior World Championships in Argentina, he had already been racing for six years.

And in the months before the Junior Worlds, he trained especially hard. There had been sacrifices—he flunked his high school physical education class, for instance, because he didn't have time to attend—but somehow a win or a top placing in a world championship would be worth it.

Pat felt it would settle a long-ago score for his parents, too. Once accomplished athletes—his father was a football champ and his mother, a swimmer with Olympic potential—each had been sidelined by injuries before they achieved national recognition.

So Pat was primed for his last match in the sprint competition. A victory against his Argentinian rival would have put him into the top eight.

For the first two laps, Pat held back, jockeying for position and waiting for the right moment to make a move—as riders always do in match sprints. But at the sound of the final bell, he sprang into action, pumping furiously. He flew past the Argentinian. As McDonough rounded the corner, his opponent came from behind and smashed into his bike. At impact, Pat later remembers, "my front wheel waggled so much that I knew the race was over. In a matter of seconds, I saw all the years of effort go down the drain."

"I was fouled," Pat protested to the Argentinian official, but the official shook his head.

Then something snapped inside Mc-Donough. His cool-down ride had been anything but; as he rode around the track he became more and more angry. He dismounted and began screaming and arguing with the official. And, as the Argentinian audience whistled and booed, he gestured obscenely at the crowd of 14,000. "I gave them the old arm. They knew what that meant!"

Ironically, Coach Jim Grill is convinced, the jury of appeals would have reversed the officials' decision. Instead, for his display McDonough was disqualified from the race and from further participation. After making a public apology to the crowd, he was later reinstated and was able to ride in a points race.

"Looking back, I'd have to say I was ready to explode," he admits now. "If only there had been somebody to say, 'Hey listen, I think you should go off by yourself or 'Here, take this box and kick the heck out of it, or scream or cry, or do whatever you have to do.' Because after I did that, after I cussed and everything else—it was like I'd had about 2,000 pounds on my back and someone took it off. I felt great."

Well, maybe not great. "The Argentinian

ended up in eighth place," he says wryly, "and I was disqualified for using obscene gestures. Which just goes to show you the moral of the story: if you want to do well, you've not only got to get yourself together physically, but mentally, as well."

### Mind Games

Even the best-prepared rider can perform badly in an event when faced with personal or professional pressures.

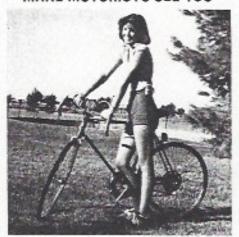
"Why, I've seen the calmest cyclist you can imagine practically get into a fistfight right before a track ride," points out Leonard "Harvey" Nitz. "The pressures are just so intense."

On the other hand, it's also well known that athletes who manage to harness their mental energy can do exceptionally well. Take Nitz, for example, who confounds the experts by performing relatively poorly on any kind of laboratory test, yet consistently wins medals.

"I don't know what to make of it," he says thoughtfully. "I'm certainly not as powerful as a rider like Steve Hegg, yet by the third lap, I'm going faster than anyone else on the track. A Jot of my strength comes from up here," he says tapping his temple. "I have to pump myself up mentally before every ride. If I had to rely on just the physical—forget it."

Or consider Brent Emery, the 1981 kilometer champion. "In a sprint, I can pretty

## BELT BEACON® VISIBLE OVER A MILE MAKE MOTORISTS SEE YOU



WEAR IT ON YOUR BELT . . .



... OR MOUNT IT ON YOUR BIKE

GETS ATTENTION. "offer(s) a distinct safety advantage." Its"... flashing has the advantage of attracting. a motorist's attention when riding in traffic ... " (Technical Editor Fred DeLong's article "Keeping Alive at Night," BICYCLING!. April 1975.)

Large amber flash. Darkness visibility over a mile. New, Improved M3B series Beacons are brighter than most barricade flashers. Special signal lamp is driven by a two-transistor solid-state oscillator and ordinary 9-volt transistor radio battery.

Long battery life. With alkaline battery: M38 over 75 hours: M3B Touring 90 - 200 hrs: M3B60 70 - 140 hrs.

Approximately 4 oz. w/battery, 3" dia. × 214". White Cycolac® case, amber acrylic fresnel lens. Belt clip and hardware - attach to belt, bike, beg, pack, clothing or pannier.

SOLD WORLDWIDE, LEGAL ALMOST EVERYWHERE. 10-day money-back guarantee, 90-day warranty. POSTPAID.

At your local BICYCLE SHOP (dealers wanted), if unavailable order by coupon or a note to: AMPEC & ASSOCIATES, INC., Dept. 88-200

Box 15461, Phoenix, Arizona 85060 

SEND \_\_\_\_\_\_BELT BEACON M38 TOURING, as above but

El Send ....

NAME	
ADDRESS	

\*1982 AMPEC & ASSOCIATES, INC.

well dust Brent," says McDonough. "And yet Brent can somehow ride the kilometer faster than anybody else in the United States, and all it comes down to is that he puts more into it, mentally and physically, than anyone else. Brent rides to 100 percent of his capability, whereas most people don't even get near 80 or 90 percent.

Fostering that kind of motivation and concentration in all potential Olympic contenders is what the Olympic Cycling Committee (OCC) would like to do. And so, with seed money from the United States Olympic Committee, they've contributed research funds not only to explore the mechanical and physical aspects of the sport, but the psychological demands as well.

"There comes a point in competition, when you've been riding a bike for ten years or so, when you know a lot about the physical aspects of training, but you may not know how to develop a mental edge," explains Dr. Andrew Jacobs, a sports psychology consultant enlisted by the OCC to work with Olympic-caliber riders. While he has done evaluative testing with about a hundred riders Juniors and Seniors, both men and women-Jacobs has had occasion to work closely with about 20 racers, most of them track riders.

He has worked particularly hard in the past year with cyclists who are likely Olympic candidates for the team pursuit, an event in which two four-man teams start on opposing sides of the track and race 4,000 meters. Each team rides in tight, single filea feat requiring both physical strength and intense concentration.

### Winning Edge

"The mental aspect is so important in competition. You can have two riders with exactly the same training program and comparable physical abilities, yet one will succeed because of his mental attitude," says Jacobs.

Convincing racers of that isn't always easy. "Their first reaction is normally, 'Look, I'm not crazy-I don't need to see a sports psychologist.' But then they find I'm here to help. The way I look at performance, it's a result of what's going on in your personal life and what you're doing on an athletic level."

To that end, Jacobs not only offers oneon-one counseling, but also uses hypnosis and muscle relaxation exercises to ease preperformance jitters and help the cyclist concentrate fully on his event.

In the past year, he's seen some dramatic results. During the 1982 Sports Festival in Indianapolis, for example, Harvey Nitz received news of a tragic automobile accident in which his mother was killed and his father was critically injured. Nitz decided to compete as planned, feeling that his parents would have wanted it. He credits the talks he had with Jacobs for helping him "pick up the pieces" and go on to victory in the points race.

And Brent Emery, the former kilometer champ who was stymied last year by injuries, suggests the sports psychologist gave him a new perspective on his cycling career. "When I lost the kilometer (because of injury) at the Sports Festival, I felt very. very down. I went from being a national champion to nothing. But the sports psychologist convinced me that when something breaks in my body and I have no control over it, then I can't punish myself. Realizing that helped me get back on my feet and train."

As Jacobs points out, a healthy competitive attitude boils down to a matter of perspective.

'Many cyclists are perfectionists," he says. "If they don't do well in a race, they cut themselves down. And when they succeed, they still fault themselves. Top notch cyclists sometimes dwell on their flaws rather than successes. Through sports psychology, we try to turn things around so when they come in fourth and fifth at the Worlds rather than saying, 'We blew it. We didn't take first,' they'll think instead, 'Look how far we've come."

### Rapid Gains

Eastern European countries have been examining the effects of concentration, motivation, and stress on the athlete since World War II. The powers of concentration of the Soviet bloc athletes can be awesome. After returning home from the 1982 World Championships, Nitz complained that the East Germans were so emotionless they resembled robots on their bikes. "That's just a way to 'psych out' your opponent," contends Bob Nideffer, author of The Inner Athlete. "Boxers, for instance, often play a psyching game with each other called 'Who's Ugliest?' Sonny Liston gave us perhaps the most famous example of a cold, hard stare. The idea behind the (East German) move is to impress upon your opponent that you have no love for him, that you are real mean, and that if possible, you'll destroy him."

By contrast with Eastern European countries, the U.S. is relatively new at sports psychology. However, increasingly sophisticated tools of evaluation are being developed. While Jacobs relies on biofeedback machines to measure muscle tension,

155

# FITNESS

he also uses a comprehensive written evaluation called the Test of Attentional and Interpersonal Style (TAIS), which determines how competitive a cyclist is; the depth and breadth of his or her attention span; and how the rider handles stress—all important factors in competition, especially when winning or losing is a matter of seconds.

Already the written evaluation has yielded interesting results for team pursuitors. Among other things, it showed that John Beckman is easily distracted by crowds; Harvey Nitz sometimes feels intensely anxious before a ride; and Dave Grylls and Brent Emery need to work harder to develop a sense of teamwork.

### On Track

To Jacobs, it's all a matter of concentration. Take Beckman, for instance. He has a narrow, internal focus of attention, meaning he does very well with small details such as following his teammate's wheel in the pursuit. But he is easily distracted by the noise and broad scope of a crowd.

"When I hear people screaming, 'Faster, faster,' it takes my attention off the bike. I immediately think, 'That's easy for you to

To help Beckman concentrate solely on the bike, Jacobs uses hypnosis, a common technique among sports psychologists to help athletes relax and concentrate. ("It's not the hocus-pocus you see on television," Jacobs says emphatically. "We don't put athletes in a zombie-like state and then send them out on the field. Hypnosis is a form of relaxation. In effect, we're teaching athletes how to relax themselves.")

The first step requires Beckman to lie in a quiet, comfortable setting and to concentrate on taking long, deep breaths.

Next, he'll tighten and loosen the various sets of muscles from his head to his feet, one set at a time. This exercise physically relaxes Beckman and helps him see what areas of his body may be holding the most tension.

"Imagine yourself on a warm beach," Jacobs tells him. "You're feeling very comfortable and relaxed. There's a door nearby. Walk through that door and out onto the track."

In this third phase, Beckman mentally rehearses his ride. He sees himself perform in the pursuit perfectly, riding smoothly and steadily as he maintains a three- to six inch gap between bikes at speeds faster than the U.S. record, 33 mph, Everything is blocked out except the bikes, his teammates, and the finish line.

After practicing this exercise for several

months, Beckman will be able to put himself into a relaxed state of concentration without Jacobs' help. A single word or gesture, called a "trigger mechanism," will call upon the months of psychological training. He may tighten his grip on the handlebar or slap his thigh—and suddenly he'll be back on that mental beach, relaxed and ready to do a perfect ride.

Sound farfetched?

Among the pros already using self-hypnosis is Ray Wersching, a field goal kicker for the San Francisco 49ers, who is said never to look up at the goalpost when preparing to kick. Instead, he lines up the ball with the hash marks on the field, taps the quarterback's helmet as a "trigger" to relax, takes two steps back, and follows through with the kick.

The riders themselves hope Andy might bring out the "winning edge." "What it comes down to is that sports psychology may give us a little edge," says McDonough. "You want to get the best equipment, and you want to get the best out of your training. And, well, you also want the best from your mind."

### Overcoming Anxiety

Jacobs' first task is helping the cyclists relax before they go to the starting line.

"Nervous' isn't the word for how I get," admits Nitz. "I've gone into National Championships just shaking. My knees wobble and I have to run back and forth to the restroom."

"I used to feel horrible anxiety before a race," agrees McDonough. "Sometimes I'd be really tense. All my muscles would tighten. I'd feel queasy and nauseated. Mentally, I'd be saying, "You have to do good."

To help the riders cope with pre-event anxiety, Jacobs first works on finding the cause. "Some cyclists are afraid of failure," he says. "So I tell them failure is part of a learning experience. Everyone fails at some point; the key is to take something positive from it.

"People sometimes respond to pressure by 'freezing,' " says Jacobs, who also works as a consultant for the University of Kansas track and field teams.

"Just two weeks ago, a runner at a track event came up to me and said he was too scared to run. I worked on getting him 'pumped up.' What you need to do is build up their confidence, dwell on the positive, and tell them to be strong and aggressive. I say, 'Look, you got here and you have everything to gain and nothing to lose—go for it! The worst thing that will happen is that you

# WE TOLD THESE PEOPLE WHERE TO GO,







# AND THEY LOVED IT!

Long distance touring can be as confusing as it is rewarding. With so many ways to go, how do you choose the right road? Ask us. Bikecentennial is well on its way to mapping 15,000 miles of cycling routes in nearly every part of America. John us and you can also choose from 10 intriguing Bikecentennial trips. Our trips show you America from a new perspective, including for the first time, a mountain-bike-view of the heralded Lewis & Clark Trail. Send today for your free Bikecentennial information packet. We'll tell you where to go.



The Bicycle Travel Association

P.O. Box 8308-A, Missoula, MT 59807 (406) 721-1776

# FITNESS

won't do well. But that's not going to be very different than if you don't run."

Some riders are more intense than others about doing well. While John Beckman says casually, "If we win (an Olympic) medal, we win," Brent Emery is already counting down the days. "When Brent reminds me it's only 500 days to the Olympics, I want to scream," Beckman confesses. "That kind of psyching up makes me nervous. I do best when I'm calm and relaxed—like when I entered the national points race just for the heck of it and won.

"On the other hand, at the Nationals, we rode against 7-Eleven—a team that's always intimidated me—and I got so rattled I was moving like molasses."

Being too intense can backfire. "Perfectionists are hard on themselves," observes Jacobs. "They have such high goals that they often envision themselves screwing up on the track. With them, I do attentional control training. I'll have them write down an event in which they've completely screwed up. Then I'll have them go through it step by step and identify their mistakes. From this, they can turn the situation around and then 'mentally rehearse' a ride in which they do everything right."

"The mind is pretty powerful," Mc-

Donough acknowledges. "I know that I usually do well in the races which I've visualized winning beforehand. As a junior I remember riding with LeMond and a bunch of big guys, thinking 'What am I doing here?' But I broke away with 20 miles to go and won. All week, I had seen myself doing that.

"At the same time, I think the biggest thing I've realized from talking with Andy and just growing up is that I had to learn how not to be afraid to lose. Everyone used to say, 'Winning is where it's at'—and I'd get tense. Now, I just do my best. After all, even Le-Mond loses."

### Teamwork

But sometimes the team pursuitor's anxiety doesn't stem from a fear of personal failure, so much as a fear of letting the whole team down.

"When I have an off day, I do feel guilty," says Dave Grylls. "Three other people are depending on you."

Working with the team was a problem for Grylls at the 1982 World Championships in Leicester, England. Although cyclists rarely point an accusing finger at each other (after all, anyone can have a bad day), it's generally agreed that had a sports psychologist

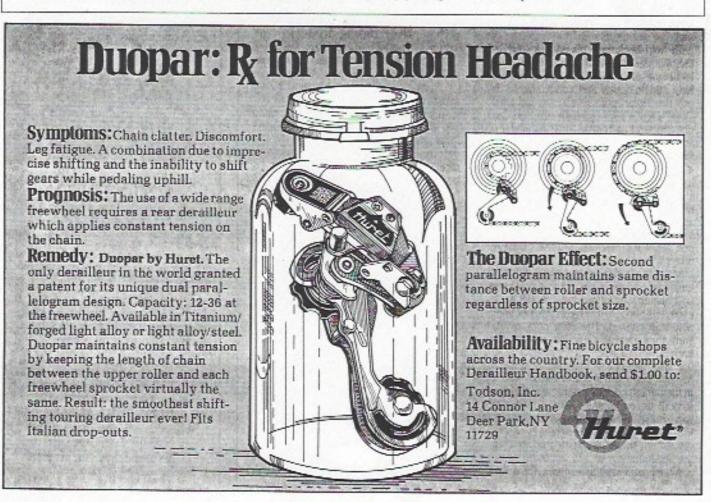
been present at the Worlds to help Grylls work out his problems, the U.S. would have fared much better in the pursuit. As it was, the team, which was hoping for a medal, ended up in tenth place.

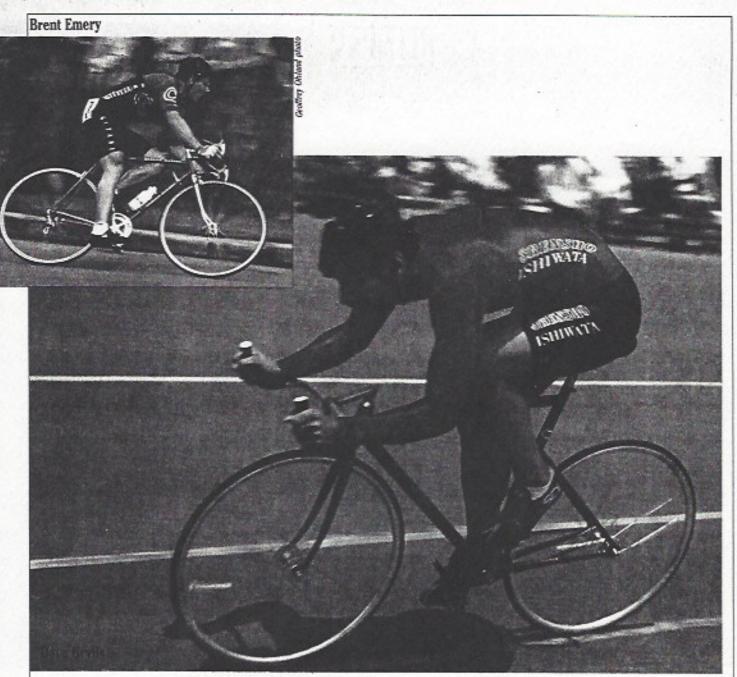
"I needed someone to talk to; it would have helped a lot," Grylls says later. "I felt screwed last year. I didn't know which events I was going to ride, and the pressure was on me to do well. I felt nervous and bothered, and in the confusion, I felt like no-body gave me any straight answers."

Although he was planning to ride in both the team and individual pursuit, at the last minute he was replaced in the individual by Steve Hegg.

On the day of the team pursuit, Grylls went down to the track feeling disoriented and irritable. And it showed in his riding. "We all knew something was eating away at him," says Beckman. "He rode so slowly."

"The problem with the team pursuit is that it hurts everyone when you have a bad day," laments McDonough, "The night before the race, I used the visualization techniques that Jacobs suggested and imagined 'seeing' the outcome of the race 10 or 12 different ways. But never in my wildest dreams did I foresee Dave Grylis having the worst day of his life."





Grylls wasn't the only rider to react to the pressure. "I felt physically and mentally drained at the Worlds," says Nitz. "For the first time in my nine-year career, I started to feel pressure. It worries me because I think it will be worse in the coming year."

Since the Worlds, the pursuitors agree a sports psychologist is an absolute necessity at events. Sometimes, for example, they need help in working as a group.

"Team pursuit is a tough event because basically everything else in cycling is an individual event. It's real hard to take these guys that you're competing against in every other circumstance, and then have to work together as a cohesive unit," points out Grylls, whose rivalry with Nitz in the individual pursuit has been reported by the press for years.

"It is hard," admits Jacobs. "They have

to make their antagonism toward each other work for them. They need to say, 'Listen, I wanted to kick your butt in the last ride, but now let's get together and kick the other team's butt.' "

Jacobs is working now to improve the pursuitors' spirit of teamwork on and off the track.

"One thing I learned from the TAIS is that I like to be in control," Grylls reveals. "And I can be negative. In a team pursuit training camp, when something goes wrong, I'll mention it. I'll be the first to say, 'The food here stinks,' which isn't good for morale."

"What Andy's done is shown us how to be sensitive to each other," agrees Brent Emery. "I have a hearing problem, and when people would say things and I didn't respond, they'd feel ignored. Now I'm trying to pay attention. "Sometimes it's not just the strongest team that wins, but the team that works best together."

### Outside Pressures

For many riders, the problems don't end on the track. Racing is a 24-hour preoccupation.

"Cycling is kind of a crazy sport because you're called upon to do many things and you don't get a lot of money for it, and you're living a gypsy life," Ed Burke, USCF Sports Medicine Coordinator, points out.

"Cyclists lead quite a different life," seconds Harvey Nitz. "You don't have any time to relax. You also don't have any kind of privacy."

Then, too, because cycling has yet to attract the money found in many other more

popular sports, such as baseball and football, some serious riders are forced to live at home on their parents' income while they

"At 22 or 23 years of age, that can be demeaning," points out John Beckman, who, until this year when he was spon-sored by Murray Bicycles, had been forced into that situation.

"My parents are nice people, and they understand what I'm doing. So if I hadn't gotten a sponsor this year, they said they'd help. But there's no way on earth I wanted to do that. I'm 23 and I'd rather not have to borrow money from my parents. I think this is a problem all serious cyclists suffer through."

Ironically, Jacobs feels the best way for riders to deal with the emotional and financial pressures of cycling is to devote more time to interests outside the sport.

Elite athletes see sports as a way of life," he says. "They need a release -- a hobby or something-that's completely different. The head track coach at the University of Kansas, for instance, paints in his spare time. If a cyclist doesn't develop outside interests, he becomes single-minded.

"And here's where drugs become a problem. They become a release. So does alcohol. It gives people a high and an escape."

"I guess the biggest thing I've talked over with Andy was that I had no goals in my private life," agrees Pat McDonough. "I think that's why, a few years back, it was easy for me to fall into drugs and a bad, bad feeling about myself. It was as if it didn't matter what happened to me as long as I achieved

what I wanted to on my bike.

"One thing about cycling is that you usually get involved in the sport at a young age and you don't really have the chance to grow up as a person. But all that's changing. I know that to be the best in a sport, you are going to sacrifice a lot, but it still can't be everything. This year, Andy and I set a few personal goals. I want to get back into photography and speed skate for fun. I'll also do a lot more reading.

"Cycling is important but so am 1."

### Rising to the Top

With the Olympic Games less than a year away, athletes are feeling the pressure. When Dr. Jacobs visited the OTC in Colorado Springs last January, so many elite riders wanted to talk with him that his private sessions often ran past 2 AM.

"Part of the pressure comes from knowing you'll be representing your country," says.

There's definitely a big push coming," Beckman concurs, "especially with the games being held in our country. I ask myself how I'll feel going up to that line in front of a largely American audience and trying to do something that no American pursuit team has ever done. Just thinking about it gets my heart rate up.

There's no doubt being in the spotlight is a problem," notes Jacobs. "You've got to know you can't always perform the way

people want you to."

Paradoxically, facing the fear of losing makes it easier to win.

"Right now, I have terrific pressures on myself because I had some problems in the middle of last season," says Grylls. "I feel like I let some people down.

"But having a bad period actually revitalized me. Just talking with Andy has helped me make a list and figure out what's bothering me, and then attempt to solve it."

Pat McDonough feels similarly. "This is the year I learned to handle the pressure I have within myself," he says. "And I think now everything else-the problems, the demands-will take care of itself."

