

THE COMPLETE TRAINER

This is really a fishing expedition for many of the missing tools, which should be in everyone's tackle box. It really is "all about selection". Training for cycling events is quite a bit more than just riding the bike. What follows is about "training devices".

The most vital items in the training tackle box & race kit, for that matter, is also the cheapest, longest lasting & hardest to use. The items are a notebook & pencil. This pair of items is the original hard drive essential for recording the plan & its execution, volume, intensity, progress, weight settings, race info, competitive info & even new found friends. I suspect that most of us who were willing to use a notebook correctly could improve our incomes & even our IQ's. If you want last year's performance, then use last year's methods.

Part of any training package has got to include the devices to train the brain-- in fact the Train Your Brain cycling training manuals are available from the U.S. Cycling Federation in Colorado Springs, CO. It's pretty hard to overeat on brain food such as the many good publications available, including the Conditioning Press Publications who publishes the Performance Conditioning for Cycling Newsletter. Information should be available on their websites <http://www.usacycling.org> & <http://www.performancecondition.com>

In today's high tech world, software becomes a valuable training device. There are a number of good calendar programs for planning & noting results. Coaches frequently supply training plans in calendar format. A spreadsheet makes a great record keeper & planner. Many wonderful products are for sale or even free. PC Coach is a commercial program with built in plans & record keeping functions. Free for download from <http://www.crosstrak.com> is Cross Trak. Cross Trak is a training record keeper that can import heart rate data & send training records to your coach via E-mail.

Do you make good use of your stopwatch? Are you timing your intervals & doing regular time trials to check your progress? Stopwatches can be happily married to notebooks.

Many devices are wonderful, but are badly used. Bike speedometers with or without cadence meters are regularly misused-used. We tend to look at the "average speed" of a training ride--- such focus will bring slow improvement & a lack of adaptability. Lots of "one speed riders" race bicycles. Cadence meters can be wonderful. Extra leg speed can be trained & it is almost free. Lance won his Tour by paying great attention to cadence. Speedometers are also good for measuring maximums as in top speed & maximum RPM's. When used for maximums, then your speedometer can become a "goal setting tool".

Near the top on many athletes list is their favorite device, the heart monitor. HRM's (one is not a techie without the acronym) are wonderful devices when used to establish maximum's, recovery times for progress, testing capacity, & coach assignments. The other side of the coin in practice is that, dependence on certain readings is likely to prevent maximum efforts & lead to rigid training patterns. Obsessive use of an HRM can easily make it become coach & master.

An oldie but goodie & a real classic training device is a set of rollers. Rollers are the top device for working on cadence, pedal style & leg speed. Repeated flat out intervals on a fixed gear bike can easily get to maximum heart rates. Rollers are very effective as warm-up tools when it's dry & flat. At the 1986 World Cycling Championships in Colorado Springs, the Czechoslovak Pursuit Team warmed up for over 45 minutes on rollers just before their event & became World Champions over the West Germans by hundredths of a second. The West German team got off their rollers at about the half-hour mark. There may be something to this!

There are all sorts of resistance trainers available at prices that range from \$150 or so to over \$4000. One size does not fit all! This group includes exercisers, wind trainers, magnetic trainers, video/digital trainers & the unique SRM System. Each trainer features its own specialty. Tackling this subject is dull to read but fun to experience as an athlete.

The classic machines are the ergo meters such as made by Tunturi & Monark. These trainers are found in training rooms & hospitals worldwide. The better units are used for athletic testing and training by physiologists, physical therapists, scholars & coaches everywhere. Most of the better units are scaled in universal units of work, which can be useful to all. You can check the sites at tunturi.com & monarkexercise.com. I believe that not all of the information on all of the products is listed, but with the new technology, many have pre-programmed training events on their digital screens.

Don't forget the obvious--and very useful such as the Schwinn exercisers & spinners. These exercisers don't read resistance. Lots of effective training can be done with these exercisers with emphasis on leg speed and muscle balance-- one can't be a sewing machine-- they kick back.

The most sophisticated training devices are the feedback units such as CompuTrainer, Tacx Ergo, Cateye Cyclosimulator, & the SRM System. Most familiar, is the CompuTrainer, from Racer Mate of Seattle, Washington. The CompuTrainer models range from the BasicPro without video to the ProPC1 with planned programs & feedback to a computer screen. The CompuTrainer website, <http://www.computrainer.com> has a wealth of information from acknowledged authorities. I particularly like articles from Sean Drake on testing & dynamic bike fit using the CompuTrainer.

Details on the Cateye Cyclosimulator and the Tacx units are to be found at Cateye.com & tacx.nl.

The SRM is unique because rather than use resistance from a magnet or fan & cadence counts, information is generated from strain gages in the crank. Information generated can determine the RPM sweet spot for greatest efficiency at power. Prices range from \$1600 to \$4600. There is lots of information on their website, <http://www.srm.de>.

That's nearly a creel full of information & an idea or two to improve your training. Thanks for you attention.

Questions answered!

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