

GOLDEN GATE TRIATHLON CLUB

www.ggtc.org

FEBRUARY 2005

LETTER FROM THE COMMUNICATIONS DIRECTOR

Well, it is only the beginning of February and already we are off to a terrific season. There is a lot of exciting things going on with GGTC, to name only a few: a fantastic new website with unbelievable features by our very own Fernando Chilvarguer, the welcoming back Sarah Rusby to the board from a brief one month hiatus, a Wildflower training weekend that will forever change the way you think about WFTW, and a really great Tri and Give turnout. We have many new members, too!

As we go forward into this season, I wanted to begin to plant the seeds of volunteerism. GGTC is run completely by volunteers. Triathlon for me, and I suspect for many of you, is so much more than an everynow-and-then activity. It changes the way we think, live, and breathe (mostly breathing very hard). Throughout this year you will hear many of us pleading for help with different things - from running an aid station to helping clean up after the WFTW barbeque. Every event and the club itself would not exist without the volunteers. But volunteering is not only required for the continuation of the sport, it is actually so much fun! I mean this. Last year I got to run both the Half Vineman and the Full Vineman aid stations. This task was not easy, but it was one of the most rewarding experiences of my last year. You'll often hear people, me for example, say that attitude is the 4th sport of triathlon. What we mean is this - that if we work very hard at making the sport as great as we think it is, it will be just that. Volunteering is a chance to connect with triathlon in a way that matters, the athletes really do appreciate it, you can learn a lot, it is very fulfilling, and the sport is better as a result.

Have a great season! – Tilden Moschetti

THE GGTC TRI & GIVE PROGRAM

Tri and Give will energize your daily routine and train you to be a triathlete. We're looking for ordinary people ready to experience an extraordinary event. YOU will be training for the Wildflower Olympic Distance Triathlon, Sunday, May 1, 2005. You will swim 1 mile, bike 24 miles and run 6.2 miles. When you cross the finish line, the trilogy of triumph is an adrenaline rush beyond compare, with bragging rights to match.

Neil and Laura Fraser, our TAG coaches and accomplished triathletes themselves, will head up this ten-week training program designed specifically to fit your level of fitness and ability. The Golden Gate Triathlon Club will provide you with experienced volunteers and membership in the club voted "Best of the Bay" three years running!

The majority of the program's fee, minus some administrative costs, will be donated to local charities helping fellow athletes and kids. Thanks to GGTC members, coaches and participants, we have raised over \$23,000.00 and shared our passion of triathlon and sports with others.

The ten-week program will begin February 18, 2005 and run through May 1, 2005. Individuals will be responsible for purchasing their own equipment (we can help show you the options), and purchasing your race slot. Signups are at www.tricalifornia.com – don't delay, the race has been known to sell out fast!

TAG TRAINING WILL INCLUDE:

- Three coached group workouts per week
- Learn techniques to safely and effectively improve your swimming, strengthen your biking and add speed to your running
- Clinics that will cover everything you ever wanted to know about triathlons but were afraid to ask
- Additional e-mail support to fuel your passion and encourage your commitment
- Equipment overview, evaluation and recommendations
- Weekly training programs emailed to you detailing every phase of your training
- GGTC annual membership
- Travel, Train and Race with the TAG TEAM



We'd like to welcome all of our December & January new members!! Check them all out below - and don't forget to say hi to them at the next workouts!

Andrea Aerts (Oakland) - Andrea is training for Olympic & ½ Ironman distance races this year. She's hoping to meet some longer ride and run partners. **Kirsten Aunapu** (SF/Marina) - Kirsten did her first tri last year (Treasure Island) and had a blast. She's signed up for Wildflower and crossing her fingers to get into Alcatraz. She's looking forward to having more training partners and coaching in the bike and swim. **Laurie Bieber** (SF/Marina) - Laurie will be racing Olympic distance this year. She would like to find some longer ride/run training partners of similar level. Laurie is a member of our **2005 Wildflower TAG team**. **Nellie Chisholm** (SF) - Nellie is new to triathlons and focused on Olympic distance for 2005; Wildflower is on her list. She is also a member of our **2005 Wildflower TAG team**. **Jesse Froehlich** (SF) - Jesse moved to SF 4 months ago and is looking forward to meeting people in the club. He's never done a tri before, but has been swimming and running for awhile. Biking is fairly new to him, so he's really excited to get going on the group rides. He's thinking of doing Sentinel later this year. **Steven Garza** (SF) - Steve is new to triathlons and is gearing up for Olympic distance races in 2005. He's looking for swimming advice and training tips. He is a lightning-fast runner (30 min 10k!) and is looking for track buddies to train with – if you can keep up with him! **Chris Gilmor** (SF) - Chris is training for Olympic triathlons this year and hopes to break 3hrs for Wildflower this year. **Anne Hall** (SF) - Anne is a self-proclaimed “sophomore triathlete” who is focused on Olympic distance & and double centuries this year. She'd like to find some open water swimming partners and mentors. **Danni Hartley** (SF/Presidio) - Danni is new to triathlons, but already runs, bikes, and swims (has just never combined all three before!). She's looking for biking mentors with great bike handling abilities and people to run with. Danni is another of our **2005 Wildflower TAG** participants and hopes to do some other races after that. **Nanci Hibsman** (SF/Marina) - Nanci is a second-year triathlete focused on Olympic distance races. She hopes to meet longer ride/run partners and wants to explore outside of the city. She's got a car/bike rack for 3 and describes herself as “competitive with sense of humor”. **Leigh Kenny** (Kentfield) - Leigh is new to triathlons and wants to complete Olympic & ½ IM distance races this year. Leigh is another member of our **2005 Wildflower TAG team**. **Jennifer Kohles** (Berkeley area) - Jennifer is new to triathlons and interested in Sprint/Olympic distance races for 2005. She's most skilled in cycling (intermediate-advanced level) and wants to meet training partners at same level or willing to be patient with someone starting out. Sounds like she's off to a good start and signed up for our **2005 Wildflower TAG team**. **Heather Kucala** (SF) - Heather is another tri newbie who is gearing up for Sprint & Olympic distance races. She says it would be great to meet training partners at her level She just joined the **2005 Wildflower TAG team** so it looks like she's in good hands there. **Jason Laskey** (SF/Inner Richmond) - Jason is a newbie to the triathlon world and has also signed up for our **2005 Wildflower TAG team**. So far he's been swimming at Koret and could use a few swim workout tips. He says he could also use some advice on buying a bike. Don't worry Jason, Coach Neil has you covered! **Karla Louie** (SF) - Karla is training for Olympic distance races this year. She's another member of our **2005 Wildflower TAG team** and is looking for mentors. **Leslie Macchia** (SF/Marina) - Leslie is relatively new to triathlons (she did a few Sprints last year). This year she's gearing up for an Olympic and is looking for lots of advice on how to “get past winter hibernation and back on the bus”. She'd also like to find mentors to help with gear selection and good “beginner” activities to try. She also requests assistance from any training partners who are “at the beginning level and not frustrated with working out with a newbie!” **Shireen Malekafzali** (SF/Hayes Valley) - Shireen is new to triathlon and is focused on Sprints for now. She'd like some mentors, advice and beginner level training. **Bill McGee** (SF/Hayes Valley) - Bill is training for Sprint & Olympic distance races in 2005 and would like to add weight training to his plan this year – any tips are welcome. **Colleen Murray** (Pacifica) - Colleen has Sprint & Olympic distance goals this year. She's currently training for the Big Sur marathon – so she's clearly a runner, but has yet to do her first triathlon. Eventually she'd like to swim from Alcatraz with her husband (a cold water addict who doesn't like wetsuits). She's looking forward to the trail runs and eventually getting out at Aquatic Park. She says “Look for me: I'll be the one trying to swim in mittens, parka & fur-lined fins... oh yeah, and I am allowed to use a snorkel too, right?” **Helen O'Brien** (SF) - Helen is relatively new to the sport and still and looking for a bit of guidance and camaraderie. She's a member of our **2005 Wildflower TAG team**. **Michaela Prescott** (SF/Nob Hill) - Michaela is training for Olympic distance races this year – Wildflower is first on her list. **Becky Spain** (SF/Noe Valley) - Becky is new to triathlons and wants to do Sprint & Olympic distance races in 2005. She is also signed up for our **2005 Wildflower TAG team**. **Bruce Thorpe** (South Beach/SF) - Bruce just arrived in SF from London (he's an Aussie though!). He's doing Sprint & Olympic distance races, and is looking forward to training hard and having fun with the club, sounds like he's come to the right place! **Jun Watanabe** (SF) - Jun is new to the city and training for IM Arizona. **Kelly Wentzel** (Portola Valley) - Kelly is new to triathlons and training for Wildflower Olympic. She's another member of our **2005 Wildflower TAG team** and is looking for a used bike. **Gary Wohl** (Palo Alto) - Gary has done a handful of Sprint & Olympic distance races over the years. His first Olympic distance races were last year, Alcatraz & Treasure Island and he had a great time. He's doing Alcatraz again this year and says that any training tips are welcome. He lives in Palo Alto, but works in the city.

Please welcome these other new members too (sorry, no bios available at this time!)

Elizabeth Boston, Knox Bricken, Mark Cloutier, Anne Dixon, Alex Dowgiallo, Amy Givens, David Grattan, Naheed Ismaili, Jason Lind, Bryan Lutz, Brieanne Martin, Carly McLean, Joanne Nelle, Brian Nichols, Carolyn Pagel, Linda Paulsen, Robert Quon, Matt Regan, Ken Voorhees, Eric Woolford – 2005 Wildflower TAG team

A STUDY OF WATER: DO TRY THIS AT HOME

By Pieter Bas Leezenberg

There is a rule of thumb that says that every pound less you weigh will allow you to go a minute faster on the marathon. And now there is the opportunity to lose weight during a race by not drinking. There is also another rule that says that your athletic performance will decrease as you dehydrate. Before jumping on the opportunity for performance improvement, we wanted to see how much weight we would lose on the bike. We had an interesting eye-opener.

Last spring Clyde Wilson addressed the club about fueling for extreme endurance events, or it may have been extreme fueling for endurance events. Clyde is a sports nutritional expert with a Ph.D. from Stanford University, so with some authority, opened the door on the science of nutrition. What fuel (the mix of calories, water and electrolytes) do endurance athletes need to force into their stomach in order to complete a long course triathlon – and why. Caloric intake poses an unexpected challenge for almost all Ironman athletes. Most athletes will feel that at some point during the run it is no longer about running as fast as you can but about slowing down as little as possible / throwing up as little as possible / bloating as little as possible / bonking as little as possible and the list goes on. We'll save the fascinating topic of GI distress for later – here we will just talk about water. The hotter and the more humid it is, the higher your sweat rate will be and thus the more water you will need to drink. The bottom line of one of Clyde's slides in particular triggered my curiosity: almost no matter how slow you run or under what atmospheric conditions, you *will* dehydrate on the marathon. Since dehydration affects your performance negatively by a certain percentage it is best try to start the run fully – as opposed to partially – hydrated.



We decided to do Clyde's simple weigh-in experiment "hands-on" since nothing substitutes for good data. Weigh yourself prior to exercising, and then afterwards (in both cases carefully evacuating right before) and determine the difference in your weight. From this you can get a ballpark estimate for your sweat rate per hour under given circumstances of pace and temperature on the bike.

The first time we weighed-in, we rode the Silverado trail 112 mile flat terrain at low to moderate intensity with temperatures in the 70's. On the first 56 mile loop I took in 3 large bottles of water but to my dismay I found that I had lost 6 lbs. After drinking a record 7 bottles on the second 56 mile loop I found back all but 2 lbs of my lost weight. In spite of drinking more than a bottle per half hour, I lost the equivalent of a more than a bottle net during this leisurely spring ride. Supposedly wiser after this early season, moderate temperature "weigh-in" experiment, we went on a more demanding 80 mi ride on an unseasonably hot August day, at moderate intensity. I took in 11 bottles of water. Upon return to Duane's house, post evacuation, I was 9.2 lbs short of starting weight. I was not alone in this extreme weight loss. Grant lost 8 lbs while taking in "140 oz" (which is his bizarre way of saying 7 bottles) and Duane lost 7.5 lbs in spite of drinking 9 bottles – however judging by the white crust on his jersey his electrolyte output is higher than either Grant's or mine. Kathy lost only 3 lbs while she took in 8 bottles. Maybe her ability to stay hydrated is one reason why she does so well in Kona. Now what do the results of this small sample tell us? At first sight this is confusing but one way to look at it: The more you drink, the more you lose. Drinking even less on hot day intuitively sounds like a recipe for disaster. Instead let's try this, we all lost significantly more weight on a hot day than on a mild day, in spite of taking in a more water. In other words, it is difficult to compensate for fluid loss when it gets hot. And the extent of dehydration gets significant really fast. You need to drink a LOT more. Having your water heat up to 100F doesn't help much either so you have to force it down. Thirst is not a good clue for your state of dehydration, but we all already knew that (right – drink before you're thirsty). Moreover, our respective evacuatory capabilities were okay after exercising – even being 9 lbs short - but got significantly challenged for some hours thereafter. In other words we all found that our ability to excrete urine is not a good guide for dehydration either. Clyde says that the most likely explanation for this is that you need to take in more electrolytes.

Symptoms observed when percentage body water weight is lost

- 0% — normal heat regulation and performance
- 1% — thirst is stimulated, heat regulation during exercise is altered, performance decline
- 2% — further decrease in heat regulation, increased thirst, hinders performance
- 3% — more of the same (worsening performance)
- 4% — exercise performance cut by 20 - 30%
- 5% — headache, irritability, "spaced-out" feeling, fatigue
- 6% — weakness, severe loss of thermoregulation
- 7% — collapse is likely unless exercise is stopped
- 10% — comatose
- 11% — death likely

In a 2nd installment we will report on the results of electrolyte intake on this subtle hydration balance. That is as soon as I can get Grant and Duane to come out again on an 80 mile ride in 95 degree weather and commit to taking three times their "normal" dose of NaCl.

BIKE SAFETY: COLLISION TYPE #3 THE RED LIGHT OF DEATH

By Michael Bluejay, BicycleSafe.com

The Scenario: You stop to the right of a car that's already waiting at a red light or stop sign. They can't see you. When the light turns green, you move forward, and then they turn right, right into you. Even small cars can do you in this way, but this scenario is especially dangerous when it's a bus or a semi that you're stopping next to. An Austin cyclist was killed in 1994 when he stopped to the right of a semi, and then it turned right. He was crushed under its wheels.

How to avoid this collision:

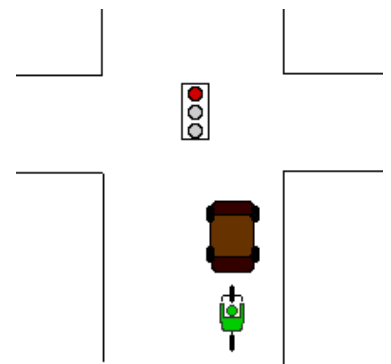
Don't stop in the blind spot. Simply stop BEHIND a car, instead of to the right of it, as per the diagram below. This makes you very visible to traffic on all sides. It's impossible for the car behind you to avoid seeing you when you're right in front of it. Another option

is to stop at either point A in the diagram above (where the first driver can see you), or at point B, behind the first car so it can't turn into you, and far enough ahead of the second car so that the second driver can see you clearly. It does no good to avoid stopping to the right of the first car if you're going to make the mistake of stopping to the right of the second car. EITHER car can do you in.

If you chose spot A, then ride quickly to cross the street as soon as the light turns green. Don't look at the motorist to see if they want to go ahead and turn. If you're in spot A and they want to turn, then *you're in their way*. Why did you take spot A if you weren't eager to cross the street when you could? When the light turns green, just go, and go quickly.

If you chose spot B, then when the light turns green, DON'T pass the car in front of you, stay behind it, because it might turn right at any second. If it doesn't make a right turn right away, it may turn right into a driveway or parking lot unexpectedly. *Don't count on drivers to signal!* They don't. Assume that a car can turn right at any time. (NEVER pass a car on the right! Ask Fred M. why...) But try to stay ahead of the car behind you until you're through the intersection, because otherwise they might try to cut you off as they turn right.

While we're not advocating running red lights, notice it is in fact safer to run the red light if there's no cross traffic, than it is to wait legally at the red light directly to the right of a car, only to have it make a right turn right into you when the light turns green. The moral here is not that you should break the law, but that you can easily get hurt even if you follow the law. By the way, *be very careful when passing stopped cars on the right* as you approach a red light. You run the risk of getting doored by a passenger exiting the car on the right side, or hit by a car that unexpectedly decides to pull into a parking space on the right side of the street.



EATING HUMBLE PIE OVER "ONLY" 7 DEGREES

Pieter Bas Leezenberg

Last 2 months I've been doing weekly long and hard Saturday rides and equal number of weekday strength workouts on board the Eddy Merckx equipped with Campy. It is now 9 weeks till race day, so I decided to bring out the P3 for last Saturday's ride with Fred and 60 or so of his best friends.

After 2.5 seasons on the P3 equipped with Campy, I have its geometry dialed in to perfection so no discomfort in position. The first 35 miles felt good included 2x20 min accelerations. After 40 miles I talked McNitt (15.8 lbs Giant) into splitting off from Fred's huge pack to go up to Marshall to make it a hard man's 100 mi.

Right. By mile 60 my legs were dying. I wanted to walk. By mile 70 I had trouble turning over the cranks for more than 10 revolutions at a time by mile 75 I wanted to call Fred to come pick me up and by mile 80 to lay down and call the ambulance (pride and McNitt prevented me from doing that).

The P3 is set up in tri position with a steep seat angle approx. 78 degrees and the Eddy has a seat angle of 71 in other words very relaxed. This 7 degrees further forward means you use muscles in a different fashion. more quads, less glutes which is good for running afterwards, but bad when you do your first ride of the season on it.

McNitt now considers me a complete dingdong 'cause he was present last year at my first P3 ride of the season as well - and those 56 miles of the Wildflower training course did not go over very well either.

Lesson: don't change your position before an important race or before a long ride. After 70 miles "only" 7 degrees seems a lot more.

THE QUEST FOR THE SUB-3 MARATHON

By Erik Metger

I would like to write about my goal of running a sub-3 hour marathon and how for the past 10 years, I have been working toward this goal, and today my PR is within 8 minutes! Besides the fact that I have accumulated a certain amount of fitness over the years, and built upon one season after the other, there are many other factors that have allowed me to enjoy the many hours of training injury free.

First a little background to give you an idea of who I am exactly. I am 35 years old today and last April I ran my 3:08 marathon in Boston. I have always loved to run, bike, and swim from a young age. I competed in my first sprint triathlon in 1990, at Bear Mountain, New York and ran my first marathon in 1993 in New York City in a time of 4:10. Also, my background in running entailed, sporadic seasons of cross country and track in high school and college where I constantly felt over trained and ill-prepared for long runs or races. I feel that the coaching was geared towards the antiquated “no pain, no gain” philosophy.

At Boston earlier this year, I was convinced I could run under 3 hours, after putting in quality and dedicated training time based on the Boston Athletic Association’s “Veteran Marathoners” training plan ([LINK](#)). The heat and the hills were factors I was not entirely prepared for. I did qualify to run at Boston again, so hopefully this April I will accomplish my goal.

I hired an online coach, Mark Conover, former 2-time Olympic Trials marathoner and trials winner. I read one of Mark’s articles ([LINK](#)) and found it very inspirational, so when I read that he offered online coaching, I emailed him right away.

Another step I took was contacting LäraBar about a sponsorship arrangement. I have been eating a case of bars weekly and coincidentally, I found out that my sister went to college with the CEO and founder Lara Merriken, so I wrote them proposing a sponsorship arrangement and I am waiting to hear back with baited breath! If nothing else, this was an exercise in committing myself to serious marathon preparation, and taking steps toward making it a positive physical and professional growth experience.

Since my first New York City Marathon in 1993, I ran NY in ’96, ’99, ’02, and I hope to run again in ’05. My first marathon was not only a challenge I pursued for athletic reasons, but after my father passed away, I found it an extremely effective way to relieve stress and meditate on life’s challenges; of course running continues to deliver my physical and mental benefits for me.

I have always heard about the deceptive hills, including bridges, in New York and Boston that sap your quads of much needed energy early on in the race. This is an especially real factor in Boston, where if you allow yourself to let go on the hills and slap the pavement with your feet on the downhills, your legs will be extremely tight even by mile 13, as I experienced this year. I also ran the Maui Marathon for the American Diabetes Association in 2001, in a time of 3:20, and felt my best in a marathon after starting slower and enjoying the rolling coastal scenery.

Some tips and tricks that I have learned are to buy two pairs of running shoes and alternate them on each run. The theory is that they will last longer and you will have a fresher pair of shoes every time you go out. I have also run with a heart rate monitor for years and this definitely helps me stay in the aerobic zone and not overwork and suffer the consequences of sluggishness and/or injury later. Stretching of course is extremely helpful in avoiding injury and maintaining a smooth running form. By joining clubs like The Golden Gate Triathlon Club with track coach Michael McCormack, the New York Road Runner’s Club, and the Hypercat Cycling Team, with coach Phil Casanta, I have picked up invaluable warm-up, stretching, and general training tips and techniques; Active Isolated Stretching was a very helpful tool early on in my post-college training. Too, while training in the Bay Area over the past few years, I was exposed to the Chi Running program and took Danny Dreyer’s intro course in Marin and continue to incorporate these techniques in my running.

Running weekly track sessions with the GGTC group, was extremely helpful for pacing and form. My mantra on the track was “no one wins at practice.” This helped me keep the ego in check and realizing that by keeping the practice-bravado in check saved me unnecessary burnout. I also received some pre-marathon adrenaline boost from reading *Running with the Buffalo* and *Once a Runner*; these books, both non-fiction and fiction, gave me great insights to the tribulations and triumph that runners can experience in one season or over the course of their entire competitive career. I immediately related to what the University of Colorado coach said, when he uttered the phrase, “there’s no cheating in running.” I have always loved the sport for its purity in yielding the exact results that are invested.

I have been fortunate to show up at the starting line to my races injury free. Besides stretching as a way to avoid injury, I get massages from Hallie Widlow, a couple of times a month when I am training for a big race. Cross training has helped me stay focused on running and avoiding injury, by not getting burned out by a monotonous running routine. I have been following the standard marathon program and substitute some runs with another aerobic exercise.

I find that running on trails also lessens soreness and injury, and makes me a stronger runner, by strengthening my stabilizing muscles; too, the varied and soft terrain does not wear on my legs as slanted, hard pavement or concrete does. It has been my experience that whether I’m training on the streets of Manhattan or the Trails of Marin and the Santa Cruz Mountains, that the more I relax and have fun, the better my times get and naturally the better time I have. I listen closely to my body and scale back on training, by taking a day or two off, or just lessening the effort when I’m not feeling one hundred percent. See you on the run and good luck with chipping away at your times and other athletic endeavors!

TRAINING TRIATHLETES

By Duane Franks

Ask any competitive triathlete and they will tell you that the only thing more challenging than the competition itself is their ability to design a training program that will include all the necessary components for success. The purpose of this article is to identify the necessary components for triathlon performance training.

Components of Performance Training:

1) *Aerobic Conditioning* - Aerobic conditioning is the foundation of a triathlete's training program. These sessions are sustained and at moderate intensity. The physiological adaptations that occur from aerobic training include, improved fatty acid metabolism, increased capillary density, and an increase in the size and number of mitochondria.

2) *Maximum Oxygen Consumption (Max VO₂)* - Defined as the highest amount of oxygen that can be delivered to and used by the working muscles, Max VO₂ training typically consists of high intensity intervals lasting between 2-5 minutes. Max VO₂ training results in both central and peripheral adaptations and can help improve sport-specific economy. Due to the higher intensity nature of these intervals, Max VO₂ training should be limited to 10-12 week cycles.

3) *Lactate Threshold (LT)* - Known also as "Anaerobic Threshold", LT is identified as the intensity that can be maintained for approximately 60 minutes by most endurance athletes. LT is also considered to be the best predictor of race performance. It is therefore believed that the primary goal of an endurance athlete's program is to raise their LT, resulting in the potential for a faster sustained race pace.

4) *Strength, Muscular Endurance & Power* - Strength is the contractile force that can be exerted against resistance. Power is the ability to apply force with speed. Muscular endurance is defined as the muscle's ability to contract repeatedly. While all three are critical for performance, endurance athletes often disregard them. This is due in part by the athlete's fear of "bulking up" or dismissed in the interest of time. A well-designed and properly implemented resistance program can benefit an athlete in many areas. These include body balance and kinesthetic awareness; improved muscle recruitment pattern; delayed muscle fatigue during aerobic effort; injury prevention and overall conditioning and confidence. Strength and power exercises are very high intensity movements that are anaerobic and last for only a few seconds. Resistance training may include weight lifting as well as short hill repeats, sprints, plyometrics and sport-specific drills. In the few weeks before the season begins, and during the competitive season, it is recommended that exercise selection be limited to unilateral, multi-joint, sport-specific exercises with an emphasis on core strength.

5) *Flexibility* - After resistance training, flexibility is the second component often disregarded by many triathletes. Increased flexibility can aid performance and reduce the risk of injury. Renowned running expert and Exercise Physiologist, Owen Anderson, Ph.D., estimates that a half-inch increase in stride length, combined with reduced foot strike time (achieved with power training) can result in a 15-minute time improvement for a middle of the pack marathon runner. Flexibility exercises can be incorporated into all training sessions and should emphasize the core muscle groups: spine, hip flexors and extensors, and shoulders. A combination of various methods such as Active Isolated (AIS), Proprioceptive Neuromuscular Facilitation (PNF), Pilates and Static Stretches are recommended.

6) *Recovery* - A high quality training session is only as good as the recovery that follows it. In some cases recovery is achieved by a complete day of rest or, at least resting the muscle group that was involved in the previous day's workout. But more often, a recovery workout for swimming, cycling or running is one that is performed at a reduced intensity and volume. During recovery workouts, triathletes should be advised to avoid steep hills while cycling and running. Trails and dirt roads are preferred over hard surfaces for recovery runs. Recovery workouts can also include sport-specific technique drills to maintain efficiency and form.

Periodization of Training

For most competitive triathletes, the goal of a training program is to form a solid foundation and then gradually introduce additional stimuli so that the athlete reaches their highest level of fitness, or "peak" at a predetermined time. The program is segmented into various stages or "periods". The seven general periods or stages in a comprehensive triathlon program are Renewal, Base & Technique, Build (Prelude) Speed & Power, Peak, Taper and Race.

1) *Renewal* - The period immediately following the last race of the competitive season - it is a time for the athlete to release the mental and physical load of training, to reflect back on the previous season and to establish future goals. This stage usually occurs during the late fall to early winter lasting between 2-6 weeks. Both intensity and volume should be reduced. The athlete will be well advised to take two to three days per week off from training. Triathletes should be encouraged to cross train in alternative sports such as cross country skiing, group exercise classes, yoga, aqua jogging, skating and other recreational activities. This is also the recommended time to begin the adaptation phase of the strength program.

2) *Base & Technique* - The period is the stage that lays the foundation to support the higher intensity training that will come in the future weeks. This period can last between two and four months, depending on the athlete's background and race goals. As a general rule, the longer the triathlete has participated in the sport, the less time they will need to spend in the Base & Technique period. Triathletes preparing for longer distance races and Ironman events should spend additional time in this period. The Base period for most should occur approximately 4 to 6 months before the first race of the season. The emphasis of training during the Base period is on longer sessions at low to moderate intensity, and technique. The final two to four weeks of the Base & Technique phase will contain transitional LT sessions in preparation of the next phase. Both the strength phase and muscular endurance phase of the strength training program should take place during the Base period.

3) *Prelude to Competition or Build* - The period that follows the Base & Technique phase is the Prelude to Competition and typically will occur approximately two to three months before the first race of the season. Weekly training volume is reduced by 25-33%. Duration of LT Tempo sessions is increased from 20 minutes to 30 to 40 minutes. Max Vo2 intervals are introduced during this stage to compliment the LT training. Together, Max Vo2 and LT sessions should be included in 3 workouts per week. Cycling sessions followed by a run, commonly called, "bricks" will also be scheduled at least twice a month. The Power phase of the strength-training program is suggested for this period.

4) *Peak* - If an athlete has responded well to the increased intensity of the previous weeks, they should be ready for peak training. This period will occur 2 to 4 weeks before the first race and should last for only 1 to 2 weeks. It is characterized by a further reduction of volume depending on race distance. However, anaerobic sessions are emphasized and expanded in duration, especially for Olympic and sprint distance events. The intensity of the Brick workouts increases to tempo pace and should cover approximately 25-50% of the expected race distance. "Tune-up" races or race-specific time trials can also be programmed during the Peak period. These should be limited to 25-50% of the expected race distance. Recovery between training sessions must be carefully adhered to and monitored with regard to proper hydration and nutrition. The strength-training program should now enter the maintenance phase with exercises limited to sport-specific movements for swimming, cycling and running.

5) *Race Week Taper* - A good peak can only result in a peak performance if the athlete enters the competition well primed and rested. It may require a great deal of trust in the trainer or coach for an athlete to accept the notion that less training is actually better. There is both a physical and psychological attachment to the process of training. The additional pre-event stress that accompanies that phenomenon only intensifies the athlete's need for emotional support. During race week, volume is reduced to less than 50% from the peak period. Intensity is limited to 2 to 3 "pick-ups" at expected race pace and in duration of 60 to 90 seconds. These brief periods at race pace should be followed with several minutes at recovery effort. The recommended total duration for the session is 20 to 30 minutes for running and swimming, and up to 40 minutes for cycling. Race week is a good time for the athlete to preview the course and inspect equipment. Due to the decreased volume of training combined with the additional spare time, it is common that some endurance athletes will overeat and gain body weight during the week preceding the race. Therefore, careful attention to hydration and nutrition is necessary.

6) *3 – 6 Week Race Season* - Some well-conditioned triathletes can maintain a peak level of fitness for several weeks. After approximately 2 to 6 weeks, the athlete may begin to experience noticeable reductions in strength and power. Endurance also lags, but usually at a slower rate. Their ability to sustain race fitness will depend on how efficiently they train during the week or weeks between competitions. Sessions during these weeks should be kept low in both intensity and duration with the exception of a few mid-week "pick-ups", Max Vo2 intervals, or endurance work, depending on the race distances. As a rule, the longer the competition, the less the need for long endurance sessions during the week. Technique drills are also recommended to maintain efficiency and form that are often compromised during race efforts.

Recycling Periods for a Longer Race Season

Some triathletes extend their race schedules for periods of several months. Since "peak" fitness can be maintained only for a few weeks, it may be beneficial to schedule brief periods (1 to 2 weeks) of Base, Prelude and Peak periods between important races.



Wildflower Training Weekend

JOIN GGTC IN PREPARING FOR THE WILDFLOWER TRIATHLON! We will be taking over Lake San Antonio for the weekend to swim, run, and bike it! There will be clinics and workouts specific to the Wildflower course. Then on Saturday night, GGTC will be hosting a BBQ.

We are expecting 125 people for the 2005 Training Weekend! The weekend is designed to be a super fun and low-cost way to get out on what is a difficult course and give it a test drive; hopefully learning some strategy and pointers along the way. It's not a weekend at the Ritz and you are not going to learn to swim, bike, or run here, but you will have a great time and meet lots of GGTC'ers! We've made some changes to the line up this year that we are really excited to bring you!

These Evites will open up for sign-ups on Wednesday, February 9th. An email will be sent out to the discussion and announcements lists, and a link on the website with the Evite link. Last year the weekend sold out in two days! So if you're interested in joining up, be ready to go on the 9th and make sure your membership status is current. All the information that you could possibly want to know (accommodations, food, aid stations, what to bring, instruction on how to sign up) is located at http://www.ggtc.org/wildflower_training.php.

This years coaches will consist of:

- Long Course (Bike/Run) - Duane Franks (GGTC Founder and Triathlon Coach)
- Short Course (Bike/Run) - Phil Casanta (GGTC Member and Triathlon Coach)
- Beginners short course – Neil Frasier (GGTC Member and TAG Coach)
- Swim – Kristina Hentschel (GGTC member and pro-triathlete)
- Post Work-out Stretching - Susan MacDannald, Physical Therapist, Presidio Sports Medicine.

You have 2 choices for accommodations: (1) cabins near the swim start, or (2) in the true spirit of Wildflower...camping. Evite will be used to track rsvp's and payments will be made through the Evite on Paypal. There are 3 different Evites based on your choice of where you're planning on staying: Tri & Give Cabins, regular GGTC cabin spots, and campers.

CABIN COST: \$97 for GGTC members. GGTC members have cabin-space priority, we will send out an email to the lists if cabin space does not sell out and there is room for non-members. The cabin cost includes: Cabin lodging in a shared bed situation for Fri and Sat nights, parking *if* you carpool, training clinics/workouts, and the BBQ on Saturday night.

CAMPING COST: If paid by 3/15: \$40 for GGTC members, non-members \$60. If paid after 3/15: \$50 for GGTC members, non-members \$70. The camping cost includes training clinics and workouts, the BBQ on Saturday night. Parking/camping *is not* included in the above fee and is paid directly to the Parks Department at the gate in the amount of \$20/vehicle/nt.

Friday, March 25th

4 - 11 p.m.: Check in - Cabin #5.
9:00 p.m.: Ice-breaker social activity

Saturday, March 26th

7:45 a.m. (sharp!!!): Newbie bike clinic
8:00 a.m. (sharp!!!): Bike Course Clinic
8:30 a.m.: Long and short course bike ride
11:30 a.m.: Newbie Q&A
1:00 p.m.: Stretching led by a PT
4:30 p.m.: Sponsor Talks/Giveaways
5:00 p.m.: USAT Rules
5:30 p.m.: GGTC Podium Athlete T1 race
6:00 p.m.: GGTC BBQ!

Sunday March 27th

9:00 a.m.: Swim Clinic
9:30 a.m.: Swim Workout
10:45 a.m.: Easter Egg Hunt
11:00 a.m.: Run Clinic
11:30 a.m.: Long and short course run

This Schedule of Events is tentative. We're still in the process of finalizing things, so this schedule is subject to revision. Stay tuned to the website for the latest information

March 25 - 27, 2005