

GODDARD
RUNNING & ORIENTEERING
CLUB

NEWSLETTER

JUNE 1987



Running Payoffs - At the national RRCA Convention workshop on running injuries Dr. Wayne Leadbetter said that the ability to run should be viewed as a gift. Some are unable to run because of disabling injuries that can persist for years if not indefinitely. This newsletter contains an article by Herb Blodget, recovering from a bout with lung cancer, which I find inspirational. If you're looking for reasons to exercise, read on! If you're not exercising but are able to, I believe you're missing an incredible opportunity at GSFC.

New Treasurer - Edwin Fung, a runner for ten years and GROC member since 1981, has replaced Rex Elliott as GROC treasurer. Rex was married on May 16 and understandably needs to spend some time with his bride. Rex has agreed to help Edwin during the transition period. On behalf of GROC thank you Rex for the outstanding job you performed for us these past few years and congratulations. Welcome Edwin!

National RRCA Convention - The following GROC members participated at the RRCA Convention in Rockville: Grace Lee (Official GROC Delegate)
Richie Weiss
Jean Lane
Ken Brown
Gincy Stezar
Fred Shuman
Ray Hartenstein
Edwin Fung

More about the Convention later and, hopefully, from other participants in a future issue. It was wonderful to see the substantial representation GROC had at the RRCA Convention. Our participation is important to the sport of running at the national level and at the local (GSFC) level. I believe we were better represented than all other clubs in the Washington area. Thanks to all!

Fritzbe's National RRCA 10K Championship Race - It was also a pleasure to see the volunteers from GROC who helped make the Fritzbe's race perhaps one of the best races ever conducted in the state. While the work was hard, the food was great and the comradery made it all worthwhile. Considering our size, GROC representation was the equal of any of the Washington area running clubs. (In number, only the larger Howard County Striders with over 20 volunteers had more.) Thanks to the following volunteers:

- Peter Hui
- Ken Brown
- Richie Weiss (and wife Sandy)
- Cliff Jackson (and wife Flo)
- Don Henderson (and fiancée Beth)
- Grace Lee
- Gincy Stezar
- Fred Espenak
- Mark Flanagan
- Angie Armstead
- George Griffin
- John Sissala (the Race Director)

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Exercising on Travel

For walking or jogging in an unfamiliar area, carry a match-book or card from your hotel in case you lose your way.

USA Today
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GROC Runners Are Thrice Blessed

Herb Blodget

GROC is fortunate in having some of the premier area runners. Just look at all of our people in the major marathons! -- and in the local events too! The exhilaration of the competition! The old adrenalin pumping can even get us "trodders" to knock a minute off our normal 20-minute time in the 2-mile fun runs.

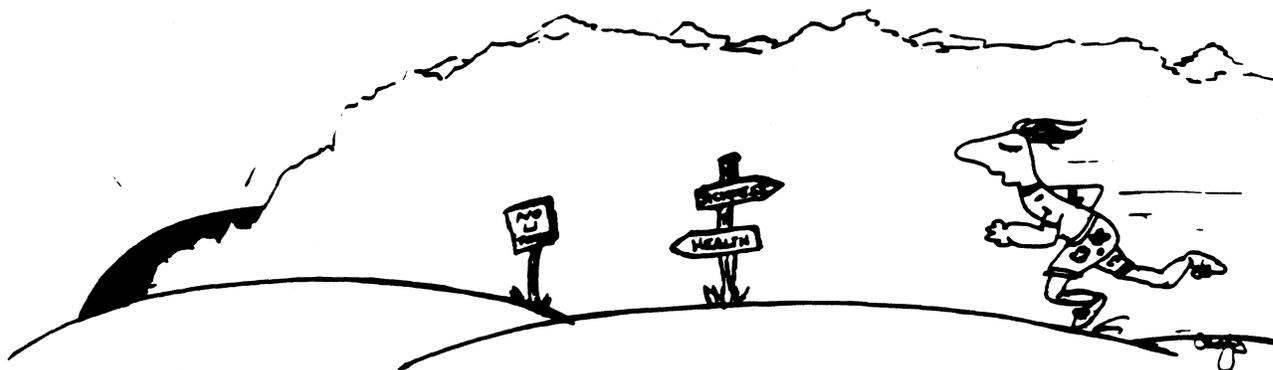
Our second GROC reward is that of good health. Running and working into one of Gincy's personally designed fitness routines keeps our aerobic capacity up and turns what might have been flab into muscle. It's a wonderful feeling too, to flush the day's mental stress and fatigue out of the system with a good physical work-out -- to get our muscles relaxed from the tightness and tension of the day.

Fortunately only a few of us are able to appreciate the third GROC reward.

Several months ago I completed a series of routine physical and lab tests. I was shocked to be told I might have lung cancer. Not me! You must be wrong, I thought, -- I haven't smoked a cigarette in over 20 years! A rash of additional tests showed the diagnosis to be correct and the surgery was completed within the week.

The benefits of the GROC experience were immediately available. First, without having to cut through extra fat, the surgical procedures were accomplished routinely and with ease (for the doctor). Recovery had also been progressing well for a body that - aside from a tumor - was in good condition. Even more important, however, having been in the GROC fitness program, I know the body can be strengthened and rejuvenated; I can look to the future with morale high, knowing that recovery will soon be complete. I am already easing back into my GROC exercise routine and looking forward to being 100 percent again in the very near future.

Fortunately mine is not the experience that many of us have to look forward to -- but it is comforting to know that we all have the third "blessing" in reserve to keep our physical and mental spirits up at times when others might find themselves in total depression.



Editor's Note: Technically, the Fitness Lab facilities belong to the Government and are operated by the Health Unit Contractor. However, it is easily understandable why many of us GROC members assume the Fitness Lab is part of GROC: Gincy is the center of GROC activities (Gincy manages the picnics and fun runs, among the many things she does); because of Gincy's active participation, GROC recognizes the Fitness Lab Director as an unofficial "officer"; most users of the Fitness Lab are either GROC members or participants in GROC activities; the Fitness Lab is the focal point for GROC runners and place for many of our informal meetings.

The hot weather came crashing in on us a few weeks ago, much to everyone's surprise. Because the body cannot adjust from winter to summer conditions overnight, many of us felt the intensity of the heat. Allowing the body to acclimate will lessen your chances of suffering from heat exhaustion or, worse yet, heat stroke. As you know high heat when combined with high humidity (so prevalent during the Washington summer) can be extremely dangerous. Below is a chart devised by the Weather Service in an attempt to describe more accurately how hot the weather actually feels, despite a lower thermometer reading.

Heat Index/Heat Disorders

| HEAT INDEX | SAMPLE HEAT AND HUMIDITY LEVEL | POSSIBLE HEAT DISORDERS FOR PEOPLE IN HIGH-RISK GROUP |
|---------------|------------------------------------|--|
| 80-90 | 85 & 20% 90 & 10% | Fatigue during prolonged activity and/or exposure |
| 90-105 | 85 & 70% 90 & 50% 95 & 25% | Sunstroke, heat cramps, and heat exhaustion possible |
| 105-130 | 90 & 80% 95 & 60% | Sunstroke, heat cramps, and heat exhaustion likely. Heatstroke possible. |
| 130 or higher | 95 & 80% 100 & 60% 105 & 50% | Heatstroke and sunstroke likely from continued exposure |

When the Heat Index rises to significant levels, take the following precautions:

1. Avoid dehydration - Drink plenty of fluids before, during and after outdoor activity.
2. Avoid salt tablets - Instead, eat a diet rich in minerals and vitamins.
3. Avoid alcohol, high sugar drinks, and caffeine - all of which act adversely on the cooling system.
4. Avoid fats and heavy meals before exercise.
5. Avoid oily sunscreens and lotions which prevent sweating.
6. Wear light, breathable fabrics.
7. Get plenty of rest and sleep.
8. Choose the cooler times of the day or find an indoor activity as a good substitute.
9. Cool down after your exercise. Stopping suddenly may cause fainting.
10. Avoid dark pavement. Seek routes that include plenty of shade and provide an opportunity for frequent water stops.
11. Adjust your exercise. Reduce your pace and distance.

Should you start to experience signs of heat stress which may include chills, headache, heat cramps, weakness, nausea, rapid pulse (any one or a combination), stop the activity immediately, get into the shade and drink plenty of fluids.

Remember, the heart works much harder in hot weather. Run wisely to run longer.

Cross Training

Bob Phillips

Cross training is a new word recently added to the running vernacular. After becoming a triathlete its significance slowly but forcefully became clear as my need for training in the three disciplines became necessarily more sophisticated in order to meet the demands of this new and challenging sport.

Simply put, cross training is developing your physical conditioning by training in more than just your primary sport. Runners, for instance, might include biking, rowing, swimming or cross country skiing in addition to running to enhance their overall running fitness.

Once involved in cross training, the question immediately arises - how much? Most runners target training objectives in terms of miles per week as the primary indicator of the level of their training efforts. When you cross train, the question is how much of another sport is equivalent to a mile of running.

As I began active swimming and biking in addition to running, my weekly running mileage began to drop even though I was training more hours than when solely running. I worried whether I was getting adequate overall conditioning and began to look for ways to determine how much swimming and biking was equal to a mile of running. Eventually, by comparing times and distances in each activity, I determined that a mile of running is equal to 2.5 miles of biking and a quarter mile of swimming. After using this formula for almost a year I was greatly relieved to read an article in Runner Magazine on cross training equivalents which used the same values. I now log my weekly mileage in terms of these weekly "aerobic units", as I prefer to call them.

With these equivalents, what do they really mean in terms of cross training? From my own experience I have drawn the following observations and/or assumptions:

1. With cross training you can do higher equivalent mileage or aerobic units than straight running miles. As a runner my highest weekly running mileage, always prior to a marathon, was 60 miles a week for a relative brief period. Recently, peaking for the beginning of the triathlon season, I have been averaging 27 miles of running, 95 miles of biking and 5 miles of swimming. Using the above equivalents, this translates to 85 aerobic units per week. I can routinely do 70 units per week whereas solely as a runner I only averaged 40 to 45 miles a week.

2. With cross training your recovery is faster. I recently did a triathlon in 3 hours 11 minutes. Knock off 5 minutes for transitions, it comes to 3:06, my marathon PR. Interesting enough, the triathlon distances were run 10 miles, bike 30 miles, swim 1 mile which converts to exactly 26 "aerobic units". (See, it works.) Yet with that triathlon effort, I was back to full training in 3 days. Not so for a marathon.

3. Cross training provides better overall physical conditioning. I can't specifically prove this but I can point to my own better feeling of overall conditioning through the cross training regimen. It stands to reason that training more muscle groups with different aerobic activities will promote better overall physical fitness as well as less overuse injuries.

4. Cross training is not a panacea for peak running performance and a slew of PR's. You can only do as well as you train and the best way to get the PR's is to do the intervals, distance runs and speed workouts. The cross training in that instance can be (and maybe should be) used on your easy recovery days.

5. Finally, cross training can be fun. Motivation plays a big role in physical conditioning. The variety offered by cross training can be one of the motivations that encourages us to take the time and effort to keep ourselves physically fit.

Convention Notes

Grace Lee

RRCA held its 30th National Convention in Rockville on May 14-17. Eight GROC members attended the Convention. Since some of the attendees have promised to share their experiences on the various workshops and activities, I will report only on the two main events: the Annual Meeting and the Awards Banquet.

As GROC's official delegate to the Convention, I had the obligation to sit through the 4-hour long Annual Meeting, required by the Constitution, and the more than 3-hour long Awards Banquet, the culmination of three days of activities.

The Annual Meeting covered mostly what such meetings were supposed to cover: greetings, reports, elections of new officers, debate of hot issues, and new business. The following is a list of highlights and items of interest from the Meeting:

--RRCA's national office is scheduled to open in June in Alexandria, Virginia

--More than twenty member clubs submitted proposals on Children's running. Nike gave RRCA a grant to implement the program. The logo for the Children's Running program was presented. (Richie and I agreed that the logo should have placed more emphasis on children's running and much less on Nike, which prominently occupied about a third of the space.)

--President Henley Gible, dismayed by the lack of participation by black runners, placed attracting blacks to the RRCA high on the list of RRCA goals for the coming year.

--The slate of next year's officers recommended by the Nominating Committee was approved by voice vote.

--The draft of the proposed new national Constitution was approved by the delegates after some discussion. Major changes included :

----Regional VP's will be replaced by Directors, four from designated regions and four at-large

----There will only be two elected officers (4 now): the President and the Vice President

----The offices of Secretary and Treasurer will be combined and appointed by the President

----The term of office for all elected Board of Director members will be two years (one year now): the President, Vice-President, and three Directors elected one year and the other five Directors elected the following year

----No elected member of the Board of Directors may serve more than two consecutive terms
The new constitution will be in effect in January, 1988. Clubs should receive the official copies later in the year. (Richie and I were planning to challenge a section on membership, which does not prohibit discrimination on the basis of gender. Upon second thought, we decided to let this go, since women runners are still a substantial minority and women-only clubs such as RunHers are valuable in encouraging and promoting women running.)

--Next year's Convention is scheduled for the first weekend in May (5-8) in Indianapolis, Indiana, to be hosted by the Indy Runners

--Gatorade is now RRCA's official thirst quencher

--And the VISA cards are coming! You'll probably be getting solicitations sometime in the near future.

The Awards Banquet was an experience. Aside from the hotel's mistake in reversing the number of orders for chicken and "vegetarian" entrees, the evening's event proceeded smoothly. John Parker, noted runner and author (Once a Runner), gave an unusually entertaining talk which he claimed was based on his books. Awards were given to the runners of the year, "Hall of Fame" inductees, etc., and club newsletter of the year. However, by the time the evening's event was over, about a third of the attendees had left (including Richie) and the rest of us were ready to dive to bed, which is understandable, since most of us had to be up early the next morning either to run or help in the race.

From the Fitness Lab

Gincy Stezar

New Fitness Technician - A warm welcome to Mark Wilhelm, the new fitness technician for the afternoon shift at the Fitness Lab. Mark graduated with a B.S. in Kinesiology from the University of Maryland. His interests include most sports with a preference to weight training and running.

Fritzbe Volunteers - Thanks to all the volunteers from GROC who crawled out of their warm, cozy beds early Sunday morning to help with the Fritzbe's Runfest as timers and finish line thirst quenchers. The fourteen of us had a great time aiding the masses and we are looking forward to the future events (e.g. the 2-mile fun run coming up in October). If you are interested in being on our volunteer roster list, please call Gincy on 6666.

Be a GROC Volunteer!

Look at these exciting possibilities:

2-mile Fun Runs

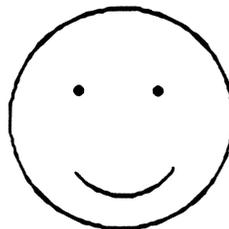
local races

**Newsletter: article writing
typing (MacPlus MacWrite)
proofreading**

Gincy's picnics

or create your own

Sign up with Gincy at the Fitness Lab or call her on x6666



Trivia from the Middle of the Pack

Ken Brown

Years ago a mathematician was doodling with numbers. He started with a one then placed another one beside it. Adding the two he got two which was placed alongside the second one. Then he added the last two numbers, two and one getting three which went alongside the two: where else? He added the three and the two and got five and got the next number of the list. Following that were 8, 13, 21, 34, 55, 89, 144, 233 and so forth. He then divided the last number by the preceding one. He got 1.6180556. Continuing he divided the 144 by 89 and so on till he got 1. He observed that the values, ranged between one and two, yet each successive value was closer to the previous one, almost as if there was a value for which the division were trying to settle on but couldn't quite reach. Now common sense would tell you that he could do more useful things with his time. What could be a more irrelevant repository of trivia than listing numbers. Well the man's name was Fibonacci and the numbers play an important part in your view of things. It's a fact that the most eye appealing rectangular shape has a ratio of the sides equal to 1.61806, the approximate resultant of the Fibonacci division. The 1.6 value has repeatedly dictated building length and width since the Greeks began to change the landscape by adding harmonious blocks and pillars to the Ionic peninsula. By the way the name for this magic number is the golden proportion. As for the list of Fibonacci numbers, they describe population growth and pseudo-randomness.

It is nice to start with some trivial concept and end up with your name known throughout the art, architectural, mathematical, cryptographical, and biological worlds. But most trivia promises to live up to its name so if you have some numbers to play with please don't read any further!



Foot Trivia

As you picture yourself running have you ever gone over the small details involved? Consider the feet. They strike the ground about thirteen to sixteen hundred times per mile. The feet move in a cycle alternately touching the ground, taking the shock of the body dynamic weight, moving in concert with the center of mass of the body along the ground, then pushing with the toes to lift the body forward and up into the air. It repeats this at a rate around two-hundred cycle per minute while a complex series of bones, joints, and tendons move in a controlled quick manner. The loads received as the foot touches the ground can exceed twice the body weight. Not only does the foot absorb the shock, it elastically converts part of the dynamic load into the power needed to drive the runner on.

The foot has two edges, the outside or lateral edge, and the medial edge near the center of the body where the arch is the highest. The ankle is a double articulating structure that turns lateral to medial and rotates up and down to allow the toes or heel to touch the ground. The knee is a compound joint that can release energy like the fancy compound bows being built to shoot arrows at high velocity yet requiring very low force to draw back to the release position. More distance is required on the draw but due to the sliding of the hinge, like the knee, the fulcrum is elongated to increase the leverage and final speed. Technical concepts dealing with running and how it is accomplished exceed the styles of running shoes.

Originally it was thought that like walking the heel hits first and the foot rolls to the toe. Then there was the three concepts which cover all bases: the heel strikers, the flat foot strikers, and the ball of the foot strikers. You can envision that this bit of trivia came from looking at the shoe wear analysis. The surprising ideas now in vogue are the result of picture analysis. The foot touches on the lateral edge forward of the ankle, and continues to build contact backwards toward the heel as the arch collapses. The angle of the foot to the leg at the initial planting of the edge is nearly

perpendicular but the ankle rotates as more foot contact occurs. During the initial plant the heel falls to store some of the energy in the bottom of the foot, dissipating the rest up into the leg, knee and hip. The action of the knee as the compound joint between the thigh and the leg ties more energy into the leg as the knee cap slides. The further away the kneecap from the joint, the greater the leverage of the muscles on the leg. As in the bow, this imparts energy quicker than the regular joint such as an elbow or knuckle. This force is transferred into the foot through the ankle. At that time the arch is collapsed so that the path to the toes are directly in line with the forces from the leg, not the lateral edge. Then the spring off the front of the toes is made aided by the wide elastic ligaments in the bottom of the foot which are strapped between the toes and the heel.

Moving is a series of rising and falling. Some of us exceed at at least on one of the two. I'm known for great fall ability. But for running your body does the rising and Newton's friend gravity operates the other. To run, gravity must be overcome, so the feet push up against gravity, release their hold on the surface which allows gravity to force us back down and then we push up again. To get somewhere the push is partially forward, with enough trajectory to cover ground as well as work against gravity. Between each foot contact the body is actually in flight. As the heavy thigh muscles work to extend the foot forward the ankle actually turns inward causing the toes to move toward the center of the body, like a pigeon toe effect. It is at this time that the foot tilts so that the outside edge contacts the ground.

Of course the whole body moves when you run. The upper body does an important job. It balances the lower body movement and can even transfer added energy into to legs through momentum. That is why good form is so critical to speed and smooth injury-free motion. You may read the above paragraphs again to do another cycle, but that might be just too much trivia. By the way, in case you are asked to identify the trivial pursuit where man can beat a horse, it's in the marathon.

Fascinating Facts

A two-ounce chocolate bar is the nutritional equivalent of four teaspoons of oil or butter plus 10 teaspoons of sugar.

Brown sugar is simply white sugar with small amounts of molasses or burnt sugar added for coloring; it offers no nutritional advantages.

University of California, Berkeley
Wellness Letters

Cartoonist on Board - GROC would like to welcome its newest member, John Croft (Code 712.3), a frequent participant in the 2-mile Fun Runs. He has volunteered to serve as the Newsletter's official cartoonist. (How many new members would take on such an awesome responsibility?) John's artistic talents will certainly spice up future issues of our Newsletter and provide a relaxing balance to the more serious aspects of so many of our excellent articles. Welcome, John, I'm sure your contributions will be greatly appreciated by our members.

Thanks, Contributors! - Thanks to all who contributed articles to this issue, which contains more variety of topics than any in the recent past. Keep up the brain work!

Attention, Healthy Choices Runners! - I would like to compile a list of GROC runners who ran in the Healthy Choices on May 31 for an upcoming article. Please check my list on Gincy's bulletin board. Thanks!

Attention, Newsletter Contributors: - Would you like to make the editor's job easier in the future? Here's how. If you can type, find a MacPlus and type your articles on MacWrite (Times font preferred, 12 points) and give me the disk before the deadline. (Being editor, I have the privilege to choose the machine for my convenience!) If you cannot type, find someone to volunteer to type for the newsletter! As you know, it's much easier to proofread other people's typing than your own. Of course, worse comes to worse, I'll take your handwritten articles!

July Issue - Deadline for submitting articles, announcements and works of art is Friday, June 26. For non-time-sensitive items and articles not conforming to the format, the sooner you turn them in the better. The following items are especially wanted: Convention memories (for Convention attendees!); GROC history, individual milestones and achievements; out-of-town or interesting races, biathlons, triathlons or orienteering meets.

GROC Officers & Staff 1986-1987

| | | |
|---|---------------|----------|
| Fitness Lab Director..... | Gincy Stezar | 286-6666 |
| President..... | Richie Weiss | 286-7493 |
| Vice president & Newsletter Editor..... | Grace Lee | 286-5762 |
| Treasurer..... | Edwin Fung | 286-7347 |
| Secretary & Training Run Coordinator..... | Jean Lane | 286-3063 |
| Membership & Race Results Coordinar..... | Jane Jellison | 286-8563 |
| Race Director..... | Vacant | |
| Historian..... | Vacant | |

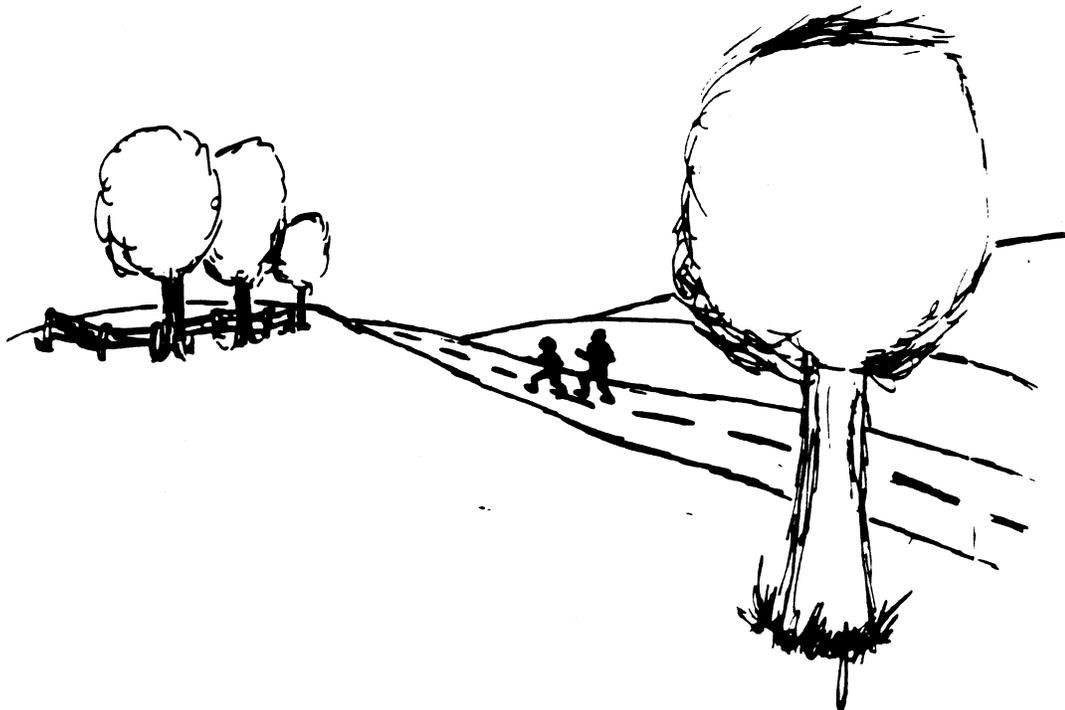
Saturday Morning Training Runs

June 6
13
20
27

"Sweetgum" Parking Lot
Greenbelt National Park

8 a.m.
(Note time change)

Contact Jean Lane for details (6-9063)



Grace Lee
711.3