



JUNE 2004 NEWSLETTER

SVBC OFFICERS

President:	
Vice-President:	
Secretary: Marshall Hammond	434-1609
Treasurer: Marcia Lamphier	432-3312

UPCOMING MEETINGS

June 14	7:30pm	Monthly meeting at Luigi's.
June 21	8pm	Shenandoah Valley Bike Festival meeting. Melanie's house - 661 North Main Street. The house is located across the parking lot adjacent to the Little Grill. For further directions, folks may call 433-7738.

MAY MEETING MINUTES

The May 10th meeting of the SVBC was held at the home of Rich Harris. There were thirteen members present and two guests, Marcia's mom and dad visiting from New York. The treasurer reported a balance of \$7,383.99.

The business meeting was shortened so the group could eat and view Rich's slides. The Club has renewed the Adventure Cyclist subscription to the Rockingham Regional Library and our sister club SMBC has numerous events taking place in June. Please see the Events section of this newsletter for details.

As noted earlier the business meeting was short so the wonderful pot luck supper could be enjoyed. There was much cycling conversation taking place on Rich's patio. After devouring various entrees and deserts we all settled in the living room for a slide show from

Rich's visit to Thailand from Jan. 1st -18th, 2004. This visit was part of the International Partnership for Service Learning and included twenty-six participating countries. The slides were wonderful and gave all of us an appreciation for the beauty and uniqueness of other cultures. A very special thank you goes out to Rich Harris and family for hosting this great evening.

The June 14th meeting returns to Luigi's and starts at 7:30. If anyone wishes to ride before, call Marcia or Marshall, they'll be riding somewhere.

The meeting was adjourned.

Respectfully submitted,
Marshall Hammond
Secretary SVBC

WELCOME NEW MEMBERS

Michael, Kari, & Lindsey Carpenter	Huntington, WV
Phil Hearne	Harrisonburg
Howard Lubert	Harrisonburg
Tim Richardson	Harrisonburg
Ben and Anna Wyse	Harrisonburg

WELCOME BACK RETURNING MEMBERS

Eddie Bumbaugh David Lorenzen Rich Rebuck
Thanks to all the above for your continued support of the Club.

All the area shops contribute to the Club.
Thanks to Mark's Bike Shop, Mole Hill Bikes, Shenandoah Bicycle Company, and East Coast Bicycle Academy.

Please support these local shops.
(Also underwritten by R.R. Donnelley Company)

SVBC ACTIVITY COORDINATORS

<u>Century</u>	Art Fovargue	433-9247	<u>Newsletter</u>	Neups	434-1878
<u>Rides</u>	Bill Taylor	828-6635	<u>Bike Festival</u>	Dan Finseth	438-8063
	<u>Advocacy</u>	Len Van Wyk	432-0138		

Web page <http://svbikeclub.homestead.com/> Message group <http://groups.yahoo.com/group/svbikeclub/>

A CALL FOR HELP

I hope this isn't being too brash. Robin and I got the call the other day and we will close on our new house on July 1st. Robin will also close on the sale of her current home that day. We've been told we can start moving items into the new house the last week of June. So we've got our work cut out for us. If anyone would like to help in these endeavors, we would really

appreciate it. I'll be moving throughout July and maybe even some of August. If you're lucky to be with us when my mother comes to help, you'll be in for quite a lunch treat. If you'd like to help, please call (434-1878) or e-mail (neups-web@att.net) me. Thanks!

Neups

SMBC NEWS AND HAPPENINGS

SMBC will be volunteering during Bike Virginia for luggage unloading at JMU on Sunday June 20th and unloading on June 21st. No exact time at this point but Thomas is the contact person. Call 434-9943 or e-mail tj@shenandoahbicycle.com. Any help would be greatly appreciated, even 1/2 hour!! This is a fund raiser for SMBC!! Bike Virginia will be paying the club for helping.

WANNABES

Many of us are avid riders, but can't hang with the fast dogs. This monthly social ride is for you! It will be an opportunity to improve your skills and strength by riding with some experienced people. The rides will generally be flat and of varying lengths (usually 15 to 25 miles) depending on participant experience. No one will be dropped. Our goal is to have fun while we gain experience. Unless otherwise noted in the monthly ride schedule we will meet on the 3rd Sunday at 9:00 am to avoid the hot weather. Call Alice Stecker (564-1611) or Scott Ripley (248-5810) for more information.

TIDBITS

The World Naked Bike Ride takes place in various cities across the globe, including San Francisco, Seattle, Montreal, and Vancouver.

"A Map of Scenic Roads in Virginia" was created by VDOT and is available at Welcome Centers and rest areas across the state or can be ordered online at www.virginiadot.org/infoservice/prog-byways-map.asp.

What a bike! Go to: <http://hinterlands.cc/index.php?s=df5330240be056833eccca3c453d011e&showtopic=88>

LUNCHTIME MUSE: HOW DO TEMPERATURE / HUMIDITY / ELEVATION AFFECT AIR RESISTANCE WHEN ON A BIKE RIDE?

Let me know if you find any errors.

I will assume that viscosity changes are negligible and that air density is the only significant factor changing in the scenarios below.

$$\text{Air Resistance} = \text{Drag Force (Fd)} = C_d * A_p * D_a * v^2 / 2g$$

Where

C_d = Drag coefficient which depends on the Reynolds #

A_p = Projected area of the object (E.g. For A_p is large, for Marshall Hammond A_p is very small)

D_a = Density of the Air

v = Velocity (speed) of the bike/rider

g = gravitational constant

Reynolds Number (N_{re}) = $v D_a L / \text{viscosity}$ where L = Characteristic Length

For our examples, we will consider the L and viscosity constant which means that N_{re} changes only for large changes in density and velocity. We will consider the drag coefficient and velocity to be constant initially. Acknowledging that if the velocity or density changes significantly we will have to relax his assumption.

For our example we will assume a constant projected area (A_p) which means the same rider on the same bike in the same position.

$$\text{Air Resistance} = K * D_a * v^2 \text{ where } K = C_d * A_p / 2g \text{ (constant)}$$

So the Air Resistance at two different air densities for the same bike velocity is

$$\frac{\text{Air Resistance Cond 1}}{\text{Air Resistance Cond 2}} = \frac{K * v^2 * D_{a1}}{K * v^2 * D_{a2}} = \frac{D_{a1}}{D_{a2}}$$

Or the ratio of the densities

1) Humidity:

Let's take two extreme examples to see the impact of humidity on air resistance.

a. 90% RH, 90 F at 1 atm Pressure

b. 0% RH, 90 F at 1 atm Pressure

a. At 90% RH, 90 F there is about 0.026lbs H₂O/lb dry air via psychometric chart.

Molecular weights - O₂ = 32 g/mole

N₂ = 28 g/mole

H₂O = 18 g/mole

Assume dry air is 79% N₂ and 21% O₂.

MW of dry air = $0.79 * 28 + 0.21 * 32 = 28.84$ g/mole

MW of moist air at 90% RH, 90 F = $((28.84 \text{ g/mole}) * (1 \text{ lb}) + (18 \text{ g/mole}) * (0.026 \text{ lb})) / (1.026) =$

28.56 g/mole

Temperature = $(90 - 32) / 1.8 = 32.2$ C = 305.4 K

Assume air is an ideal gas $PV = nRT$, $n/V = P/RT$

$n/V = (1 \text{ atm}) / [(0.08206 \text{ L-atm/mole-K}) * (305.4 \text{ K})]$

$n/V = 0.04$ mole/L

Density = $n/V * MW = (0.04 \text{ mole/L}) * (28.56 \text{ g/mole}) = 1.14$ g/L

b. n/V is based on P & T only so it is the same as in (a.)

Density = $n/V * MW = (0.04 \text{ mole/L}) * (28.84 \text{ g/mole}) = 1.15$ g/L

$D_{a1} / D_{a2} = 1.14 / 1.15 = 0.99$

1) Answer: Riding on a Hot Humid (90% RH, 90 F) is 1% easier (based on air resistance only) than riding on a Hot Dry day.

2) Elevation/Pressure:

Let's take two more extreme examples at 71 F (295 K):

a. Riding at Sea Level (1 atm)

b. Riding near Boulder, CO (~2000 m or 0.77 atm)

Since n/V is directly proportional to Pressure the ratio of pressures will equal the ratio of air resistance or...

$$D_{a2} / D_{a1} = P_2 / P_1 = 0.77 / 1 = 77\%$$

2) Answer: Riding in Boulder, CO (2000m altitude) is 23% easier (based on air resistance only) than riding at Sea Level. Of course there is 23% less oxygen at that altitude which makes riding at higher altitudes much more difficult, regardless of the air resistance (except perhaps on the downhill)

3) Temperature:

Let's take two more extreme examples at 1 atm pressure.

a. Riding on a cold winter day (32F = 0C = 273.15K)

b. Riding on a hot summer day (86F = 30 C = 303.15 K)

Since n/V is inversely proportional to Temperature the inverse ratio of temperature will equal the ratio of air resistance or...

$$Da2/Da1 = T1/T2 = 273.15/303.15 = 90\%$$

3) Answer: Riding on a Hot summer day (86F) is 10% easier (based on air resistance only) than riding on a cold winter day.

Keith A. Sandum

Disappointed about not riding at lunch time due to rain.

CLASSIFIEDS

FOR USE: Performance Hard Shell Bike Case. The Club now owns a bike case for loan to members (it should fit a 60cm, 24" bicycle). Neups will store it and loan it out on a first-come, first-served basis. If you would like to loan it (FREE), call Neups at 434-1878.

FOR USE: Burley Trailer. The Club now owns a Burley Trailer for loan to members (it is a 2-seater). The first person to borrow the trailer will also store it until the next person wants to loan it. It is currently in the possession of Len Van Wyk (432-0138).

FOR SALE: Saris Roof rack. #902 Load Bars (middle size) and 2 Upright Mounts for bikes. Fits a Toyota Camry or similar car style. The product website is <http://saris-products.com>. Load bars are great and easy to use and you get adapter clips for the car you have that are really quite inexpensive. Call Travis Lehman at 574-0204 (home) or 434-7376 (work).

FOR SALE: Thule Model 987 Lockable Ski/Snowboard Rack. Holds 6 pairs of skis or 4 snowboards. Attaches to these receiver mounted bike racks: Hitching Post models 984, 985, 986; Rak 'N' Loc models PC-2, PC-3, and SC-3; and Thule spare tire mounted bike rack model 943. All parts, keys, and mounting directions are included in original box. Cost \$125 new, asking \$75. Call Chap at 540-289-5351.

FOR SALE: Contact information: Jeremiah at 540-442-8696 or e-mail erinorth@yahoo.com. K2 Razorback Team Issued Full Suspension, size large, \$1800 obo. 2001 7005T6 series aluminum, Mega Air Noleen Performance suspensions front and rear, SRAM 9.0 front and rear derailleurs, SRAM chain and carbon 9-speed cogset, Thompson Elite post, Serfas Arc titanium/kevlar saddle, truVativ stylo ISIS drive bottom bracket/cranks, Shimano pedals, WTB Momentum C headset, KORE Elite stem, Formula B4 hydraulic disc brakes, Spinergy Xclone disc wheels, Easton riserbar.

FOR SALE: Ski rack, Barrecrafters SR-900. Mounts on roof or hatchback. Locks both skis and rack to vehicle. Holds four pair. Make \$25 donation to SVBC. Call Sue Gier (D) 434-8877x103 or (E) 833-6800 or e-mail suegier@shentel.net.

FOR SALE: Yakima Hitch Mount Bike Rack. Fits 2" receiver hitch. Carries up to 4 bikes. Integrated One-Key locking system. Three tube-top accessory bars for non-traditional bike frames. Asking \$150 Call 896-5822 after 5:50pm.

FOR SALE: BIKES: Diamondback Wildwood mountain bike. 18" with 26" wheels. Maroon color, granny gears, ridden about five times. Rear rack with carrying bag. Cat-eye cyclocomputer attached, helmet included. Asking \$265. Univega mountain bike. 17" with 24" wheels. Green color, granny gears, ridden about four times. Helmet included. Asking \$245. Call 433-8149 before 6:00pm or 867-5347 before 9pm. Or e-mail LAMBSRUN@SHENTEL.NET or LANCELOT@SHENTEL.NET.

TIME TRIAL RESULTS

Both of May's official time trials were rained out. But here's an article to keep you prepped. Why Should a Fitness Rider Do Training Time Trials? *from RoadBikeRider.com*

Question: In your Complete Book of Road Bike Training, you recommend short time trials to improve racing ability. And in newsletter issue No. 134, time trialing was recommended as a way to gauge improvement. But I'm a fitness rider and don't race. Is there any reason I should do these time trials? -- Nando R.

Coach Fred Replies: Time trialing isn't just for racers. In fact, it's the racing skill most often used in non-competitive situations.

Here's why you should consider including a 5- to 10-mile effort at time trial intensity every week or two:

--Steady, intense effort is a powerful producer of fitness. Riding at 85-90% of your maximum heart rate for 15-30 minutes will spike your fitness for tours, centuries and weekend group rides.

--Time trial speed is practical speed. Five miles from home with a thunderstorm bearing down? Time trial to safety before the deluge hits. Suppose you get delayed by a puncture on your evening commute or fitness ride. The ability to ride hard and fast will get you home before the sun sets.

---A weekly time trial varies your riding. Sure, moderately paced rides are enjoyable and not too demanding. But a steady diet of steady riding can bore you and your body. Schedule a weekly effort against the clock and you'll have something to get excited about. Before long, you'll notice your cruising speed is creeping up, too.

---Time trialing improves climbing ability. They're both continuous, strenuous efforts that reward pacing and concentration. That's why climbing and time trialing are mutually beneficial. Doing one helps the other.

SCHEDULE OF EVENTS

Helmets are required on all Club rides.

TUESDAYS	TIME TRIALS, Montezuma. Officially timed from May – September, the 2nd and 4th Tuesdays of the month at 6:30pm. On non-officially timed dates, 5:45pm, self-timed.
WEDNESDAYS	WEDNESDAY NIGHT RIDE. We leave from the Harrisonburg High School parking lot (Route 42S - 395 S. High St.) at 5:15pm for a 1-1/2 to 2 hour FUN ride. Please contact Marcia (432-3312) for more details.
SUNDAYS	SUNDAY RIDES. Rides leaving from Bridgewater College at 8am. We ride 2-3 hours+ (40-60 miles) to have fun! Please contact Rich Harris, 828-2380, e-mail harrisra@jmu.edu or Marcia, 432-3312, e-mail marcialamphier@hotmail.com each Saturday for latest ride information.
JUNE 5	RIDE THE SKYLINE DRIVE. Ride the entire 105 miles of the Skyline Drive in one day. This will be a challenging but scenic ride. Leave Bridgewater College at 7am and drive to Rockfish gap near Waynesboro where we will begin the ride. Due to the shuttle <u>you need to sign up for this ride in advance.</u> E-mail harrisra@jmu.edu or call 828-2380 Rich Harris if you want to go. Rain date Sunday, June 6.
THIRD SUNDAY	WANNABE RIDE. These will now always be on the 3rd Sunday of the month. 9:00am, Wildwood Park, Bridgewater. Contact Alice (564-1611) or Scott (248-5810) for more information.

- June 5-6 Choo Choo Challenge. Cancer fund raiser. Day 1 - 102 miles - 11,210 ft. climb. Day 2 - 85 miles - all downhill with a tail wind. Check it out at www.choochoochallenge.org.
- June 12-13 The Southern Culture MS 150 Bike Tour. http://www.nationalmssociety.org/vab/event/event_page.asp?p=9024&e=5066 The Southern Culture MS 150 Bike Tour will start and end from Walnut Creek in Charlottesville. Riders will enjoy 2 days of riding 75 miles through the beautiful Virginia countryside. The route will also feature a century loop on both days for more adventurous riders. The tour features southern themed rest stops every 8 to 12 miles; SAG vehicles, mechanics, medical staff, and HAM operators to ensure the safety and comfort of our riders. The overnight festivities at Longwood University will again feature a fabulous carbohydrate-loaded meal, music, awards, and the traditional after ride party! You may also call 800-451-0373 for more information.
- June 13 19th Annual Bay to Bay Ride. Betterton, MD. 27-104 miles, flat. Proceeds to benefit Lions Club Leader Dog Program for the Blind. E-mail them at bay2bay04@hotmail.com or find them on www.active.com.
- June 18-23 17th Annual Bike Virginia. Shenandoah Odyssey. Bridgewater to New Market and back. Visit www.bikevirginia.org or call 757-229-0507 for more information.
- June 19-26 16th Great Ohio Bicycle Adventure. Call 614-273-0805 or visit www.goba.com for more information.
- June 24-27 Cycle Across Maryland. Ride Your Bicycle Through Scenic Northern Maryland. Visit Civil War Battlefields. Pedal Through Historic Covered Bridges. Emmitsburg, MD. This year CAM is working with a new format. For those familiar with the LAB Gears, this will be similar. Visit http://www.onelesscar.org/CAM_2004/cam_info.htm.
- June 26 – July 2 10th Annual Bicycle Tour of Colorado. Loop tour from Fort Collins. Visit www.BicycleTourColo.com or call 303-985-1180 for more information.
- July 3 Big Walker Century. This is a charity century that will start and end in the town of Wytheville. Both the 100 miler (8400' of climbing) and 62 miler will cross Big Walker Mountain twice and wind through back roads of Bland and Wythe counties. There is also a 25-mile option. We hope to have our website up and running soon. The address will be www.bigwalkercenturyride.com. E-mail newberry@naxs.com or call 276 288 5610 for more information.
- July 11-18 6th Annual Bike Ride Across New York. 400-mile, 8-days from Buffalo to Albany along the historic and scenic Erie Canal. Visit www.nypca.org/canaltour, call 518-434-1583, or e-mail them at canaltour@nypca.org for more information.
- July 11-16 5th Annual Coastal Tour. Tours along the Maine coast. Call 207-743-5993, e-mail them at info@coastaltour.com, or visit www.CoastalTour.com for more information.
- July 16-18 Virginia Commonwealth Games. Visit www.commonwealthgames.org for more information.

- July 16-24 Lighthouse Tour. Nova Scotia's coast. Sponsored by the Can-Am Wheelers. Call 207-743-9018, e-mail them at cycle@canamwheelers.com, or visit www.canamwheelers.com for more information.
- July 25 First Annual Tour de Powhatan.
<http://www.powhatancommerce.org/TourDeVin.htm>
- July 25-31 Moosa Tour. Rangeley, ME to Quebec City. Sponsored by the Can-Am Wheelers. Call 207-743-9018, e-mail them at cycle@canamwheelers.com, or visit www.canamwheelers.com for more information.
- July 25-31 The Bon Ton Roulet. Finger Lakes region of New York. 350 miles. Call 607-756-2893 or visit www.bontonroulet.com for more information.
- August 1-6 12th Annual Moose Tour. Western Maine. Phone 207-743-5993, e-mail them at info@moosetour.com, or visit www.MooseTour.com for more information.
- August 1-7 Amazing Adirondack Adventure III. Visit www.adirondackbicycletour.com or call 315-258-9190 for more information.
- August 7 The Mountain Mama in Monterey is on for 2004. Go to <http://bikemountainmama.homestead.com/index.html> for more information.
- September 18-19 The Shenandoah Valley Classic Almost Heaven Bike Tour. Call 1-800 FIGHT MS for more information, or register online at www.nationalmssociety.org.
- September 19 PPTC Century. Berryville, VA. 25, 50, 62, and 100 miles. For more information, go online to www.bikepptc.org.

DUES

Remember to pay your dues when the date on your mailing label is either highlighted or marked through. The newsletter deadline is the third Monday of each month, so have your check in before then.

MEMBERSHIPS EXPIRING JUNE/July

BARBARA CARSON-CAMPBELL

W.R. GOOD

KENLYN & CAROLYN MILLER

Lou Gene Bartram

Steve LaDrew

Terry Ward Family

Dean Cummings

Charlotte McNulty

Richard Wettstone

AL & SUSAN CLAGUE

STEVEN HOSTETLER

DAN NEHER

Hadley Jenner

Will Meyers

*** Denotes membership in SMBC as well.

Don't forget that volunteering with three events earns you a free membership with the Club for the next year. Help out with the trash pick-up, Festival, Century, Wannabes, or any other Club activity to earn points towards this program.

REMEMBER that the Newsletter is available for delivery via e-mail, fax, or regular mail. The same can be said for articles submitted for the Newsletter. The deadline for articles is the second to last Monday of the month. Just e-mail to Neups at SVBC-NL-editor@att.net or fax articles to 564-9505. You may use the Club's P.O. Box 1014 for regular mail. Thanks.

Shenandoah Valley Bicycle Club Membership Application

Please Type or Print

Name(s): _____

Address: _____

City: _____ State: _____ Zip: _____

Home Phone: _____ e-mail: _____

Annual Dues Individual _____\$10.00 Family _____\$15.00 Send Newsletter by e-mail? _____

joint Shenandoah Mountain Bike Club membership: Annual Dues: Individual _____\$5.00 Family _____\$8.00

I am interested in (one or more of these activities):

_____Commuting/Utilitarian Riding

_____Touring

_____Mountain Biking

_____Riding for Fun & Fitness

_____Racing

_____Ride Committee

_____Time Trial Committee

_____Century/Festival Comm.

_____Newsletter Committee

_____Advocacy

_____Others (list) _____

INSURANCE RELEASE

In signing this release for myself, or the named entrant, I hereby agree to absolve and hold harmless the Club, the Club officers, the members, and any other connected with events sponsored by the Club in any way whatsoever, for blame or liability for any injury, misadventure, harm, loss, or inconvenience suffered. I understand that the Club is not responsible for, and is not an insurer of, my personal safety. I also hereby consent to and permit emergency medical treatment in the event of injury or illness. I shall abide by traffic laws and practice courtesy and safety in bicycling, including wearing an approved helmet at all times.

Member Signature

Date

Signature of parent/guardian (under 18)

Send to Shenandoah Valley Bicycle Club, P.O. 1014, Harrisonburg, VA 22803-1014



P.O. Box 1014
Harrisonburg, VA 22803-1014