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BAKER

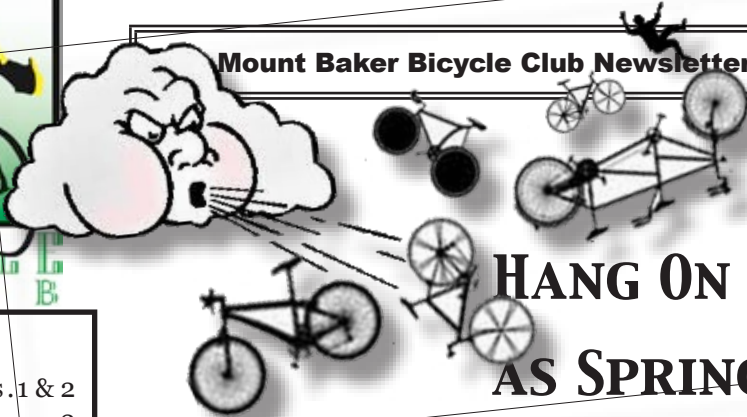


BICYCLE  
CLUB

# MBBC

**More Bicycling = Better Community!**

Mount Baker Bicycle Club Newsletter, Vol 21 No 2, March 2012



**HANG ON TO YOUR BIKES  
AS SPRING APPROACHES!**

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This month's contributors:  
Linda Blake, Doug  
Schoonover, Frederick Su,  
Brian Weeda. Thanks All!




*the club online:*

[www.mtbakerbikeclub.org](http://www.mtbakerbikeclub.org)


[www.chuckanutcentury.org](http://www.chuckanutcentury.org)

*and our social sites:*

 [facebook.com/  
mountbakerbicycleclub](https://www.facebook.com/mountbakerbicycleclub)

 [sports.groups.  
yahoo.com/group/  
MtBakerBicycleClub](https://groups.yahoo.com/group/MtBakerBicycleClub)

 [twitter.com/mtbakerbike](https://twitter.com/mtbakerbike)

 [flickr.com/  
mtbakerbikeclub/](https://www.flickr.com/photos/mtbakerbikeclub/)

## ***Coming up in March:***

### **Seattle International Bike Expo March 10-11, Volunteers Needed**

The MBBC is again hosting a booth at the Seattle International Bicycle Expo, promoting the Chuckanut Century and cycling in Whatcom County. The dates are March 10th, Saturday and March 11th, Sunday. Volunteer for a 2 hour shift, get free admission and a chance to win an entry to the Flying Wheels ride. Hours are 9AM to 6PM on Saturday and 10AM to 4PM on Sunday. Sign up soon as the spots are going fast.

Contact MBBC Event Coordinator Doug Schoonover: [Doug.Schoonover@gmail.com](mailto:Doug.Schoonover@gmail.com) or 360-410-6431 to reserve your spot.

Bellingham Whatcom Tourism is also hosting a booth at Expo and would like to share volunteers to help pump up Bellingham tourism through cycling. If you're interested in working the tourism booth, contact Mike Mors, 360-671-3990, [mike@bellingham.org](mailto:mike@bellingham.org)

This is a great way to spend the day, check out the new equipment, check out rides in other areas, attend seminars and demonstrations, and maybe even find a bargain or two.

The 2011 Seattle Bicycle Expo will be held once again in the Smith Cove Cruise Terminal, 2001 W Garfield St in Seattle. For more information on Bike Expo see <http://shop.cascade.org/content/events/expo>

### **Bellingham St Patrick's Day Parade March 17, Join the Parade!**

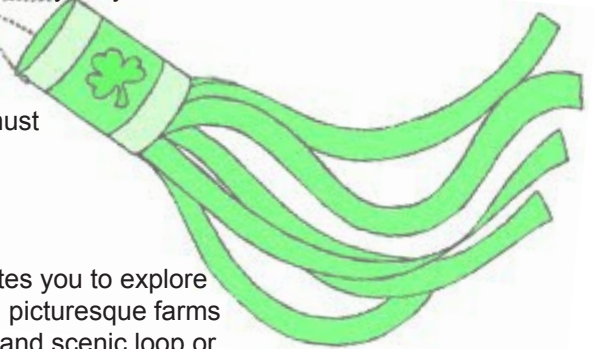
A Unicycle Team and Bicycle Acrobats will perform in this annual extravaganza, a 2-mile course through town. Come along and Decorate your bicycle to be part of the everybodyBIKE "Leprechauns" in the St. Patrick's Day Parade in Bellingham. See [everybodybike.com](http://everybodybike.com) or inquire to [info@everybodybike.com](mailto:info@everybodybike.com).

The parade will start in the Woodsmiths parking lot at the corner of Cornwall Ave. and Ohio street at 12 noon on Saturday, March 17th. All ages welcome, children must be accompanied by supervising adult.

### **McClinchy Mile, March 17 Early Century in Arlington**

B.I.K.E.S. Club of Snohomish County invites you to explore the peaceful river valleys, rolling hills and picturesque farms of Snohomish County. Ride a 34-mile flat and scenic loop or....

*continued on page 2*



# WEEKLY AND GROUP RIDES

— Winter turning to Spring edition



Kyle is the MC and Ellen is the model at February's Winter Ride Fashion Show

## Sunday Edison Social Ride starts from Edison

Elementary School parking lot. 30-40 miles, 10-14 mph, route varies. 10 am start time. For additional info: Alfred Arkley [arkley@comcast.net](mailto:arkley@comcast.net) or 360-527-8638

## Tuesday Ferndale Social Ride: starts from Pioneer Park

in Ferndale, 30-40 miles, 13-16 mph route varies. Usually 10am start time in winter. To check time and other info: Bob Parker [rmp-4724@hotmail.com](mailto:rmp-4724@hotmail.com) or 360-671-6910

## Wednesday Group Workout Ride (Winter edition:

trail ride with lights but watch for switch back to road in March): Race/Training Pace, 30 mile distance, meet at 5:45 pm, leave at 6pm from Boundary Bay Brewery at Railroad Avenue. Ride separates into fast and very fast groups. From mid-Sept-Mar this is a night trail ride with lights. Gather at brewery afterward (7:30p). 360-410-6431 info (Doug)

## Thursday South Social Ride starts from Edison

Elementary School parking lot. 30-40 miles, 10-14 mph, route varies. 10 am start time. Info: Alfred Arkley: [arkley@comcast.net](mailto:arkley@comcast.net) or 360-527-8638

**Saturday Donut Ride:** 24 – 45 miles, race pace, departs from Kulshan Cycles, 7:30 am Oct thru Feb and 7 am March thru Sept. Goes to Ferndale and return, or if you wish continue to Birch Bay and return. Every week of the year!!

**Saturday Recumbent Ride:** Second Saturday of the month at 10 am. 14 mile intown course begins at Kulshan Cycles. Sporadic depending on weather. Info: Robert Parker at [rmp-4724@hotmail.com](mailto:rmp-4724@hotmail.com) or 360-671-6910

McClinchy Mile: continued from p. 1

choose from two more challenging loops – 48 miles thru Granite Falls or 52 miles thru Stanwood when you add on the north-end extension. Ride both and make it an early season century! Food stops and SAG support on all routes. Pre-register online ([bikeclub.org](http://bikeclub.org)) or registration at 8am at the start.

2nd annual FREE family 8-mile round-trip ride to Bryant Station on the expanded Centennial Trail. The escorted family ride leaves Haller Middle School at 11am and includes snacks at the turn-around point. Children must be accompanied by an adult.

MBBC cyclists will meet and carpool down to the start. Watch the club's Yahoo Listserv for carpooling details (or if you have a ride to offer, post it there) closer to the event date. [sports.groups.yahoo.com/group/MtBakerBicycleClub](http://sports.groups.yahoo.com/group/MtBakerBicycleClub)



February's Winter Ride Fashion Show wasn't limited to the stage. Hearts, lights, and Valentine-themed costumes decorated the pre-party ride around town. See you next year!



**Sanitary  
Service  
Company**



everybody  **BIKE**



# BIKE RIDES & EVENTS IN 2012 – *check back each month as more are added*

## **BikeMonth** May 1-31

Bike Month kickoff reception - April 30  
 Procession of the Species parade - May 5  
 Summer Rides kick-off (May 6th?)

## **Bike to Work and School Day - May 18**

Adaptive Cycles Expo - May 19  
*watch for more Bike Month events to be announced in May.*

## **Bike To Work & School Day planning meetings -**

**March 7, April 4, May 2;**  
 6-8 pm Council of Gov'ts Office, 314 E Champion St.  
 Volunteer to help make this year's *Bike Day* the best ever!  
 information: 671-BIKE or info@everybodyBIKE.com

## **Gatherings**

### • **Bike Travelogue Slide Shows**

Finale of this winter's Bicycle-Touring slide shows 2012. Check  
[everybodyBike.com/calendar.aspx](http://everybodyBike.com/calendar.aspx)  
 March 21: "Salish Sea and Eastern Canada"

• **Seattle Bike Expo:** March 10-11 [cascade.org](http://cascade.org)  
 Smith Cove Cruise Terminal, 9-6 Sat; 10-4 Sun  
 The largest consumer bicycle show in the US, 250 exhibitor  
 booths w exhibits of bikes, gear, travel, health and fitness.  
 Presentations & features include museum-quality special exhibits;  
 learn-to-ride instruction and games; performances showcasing  
 world-class athletes, coaches, and speakers. (see p. 1)

• **Kulshan Cycles Ladies' Night** April 19  
 • **Bellingham Bike Swaps:** May 12, September 1st  
[thebikeshop1.org](http://thebikeshop1.org)  
 • **Pedaler's Fair** (Seattle): April 21-22 [pedalersfair.com](http://pedalersfair.com)

## **Races**

**May 27:** Ski to Sea [www.skitosea.com](http://www.skitosea.com)  
**July 14:** Padden Mountain Pedal [indieseries.org](http://indieseries.org)  
**Sept 15:** Bellingham Traverse [bellinghamtraverse.com](http://bellinghamtraverse.com)

## **Parks & Recreation Race Series**

see [www.cob.org/services/recreation/races/](http://www.cob.org/services/recreation/races/)

**June 23:** Lake Padden Triathlon  
**July 21:** Lake Padden Duathlon  
**August 11:** Bellingham Youth Triathlon  
**October 14:** Klicks Mountain Bike Duathlon  
**October 14:** YMCA Youth Duathlon

## **Trail Building**

Take some time this winter to get outside, volunteer, and improve  
 the city trails and mountain bike trails that we all enjoy. There are  
 trail-work parties being organized by the Whatcom Independent  
 Mountain Pedalers (WhIMPs) and by the Bellingham Parks  
 Department.

## **Trail maintenance dates from WhIMPs:**

Check the events calendar on [whimpsmtb.org](http://whimpsmtb.org)

*continued on p. 3*

## **2012 RIDES - MOSTLY WESTERN WASHINGTON**

### **March**

**3** Mussels in the Kettles (Coupeville) [whidbeybicycleclub.org](http://whidbeybicycleclub.org)  
**11** Gran Fondo (Ephrata, WA) [beezleyburn.com](http://beezleyburn.com)  
**17** McClinchy Mile (Arlington) [bikesclub.org](http://bikesclub.org)

### **April**

**1** April Fools' Day Ride (MBBC Club Ride)  
**15** Daffodil Classic (Puyallup) [twbc.org](http://twbc.org)  
**21** Tulip Pedal (LaConner) [tulipfestival.org](http://tulipfestival.org) (events)  
**28** Tour de Lopez (Lopez Island) [lopezisland.com](http://lopezisland.com)

### **May**

**5** Camano Climb (Camano Island) [stanwoodvelosport.com](http://stanwoodvelosport.com)  
**5** Ride Around Clark County (Vancouver WA) [vbc-usa.com/racc](http://vbc-usa.com/racc)  
**6** May Day Metric (Federal Way) [maydaymetric.net](http://maydaymetric.net)  
**12** Skagit Spring Classic [skagitspringclassic.org](http://skagitspringclassic.org)  
**13** Rhody Tour (Port Townsend) [ptbikes.org](http://ptbikes.org)  
**19** Reach the Beach (Portland, OR) [reachthebeach.org](http://reachthebeach.org)  
**28** Seven Hills of Kirkland [www.7hillskirkland.org](http://www.7hillskirkland.org)

### **June**

**2** Swan Century (Sedro Woolley) [swancentury.org](http://swancentury.org)  
**2** High Tide Ride (Anacortes) [hightideride.com](http://hightideride.com)  
**3** Peninsula Metric Century (Southworth) [twbc.org](http://twbc.org)  
**TBD** Fort2Fort (Port Townsend) [fort2fortride.org](http://fort2fortride.org)  
**9** Flying Wheels (east side) [cascade.org/EandR/flying/](http://cascade.org/EandR/flying/)  
**TBD** Bill's Hills of Bellingham (MBBC club ride)  
**23** Tour de Blast (Mount St. Helens) [tourdeblast.com](http://tourdeblast.com)  
**23** Cannonball (Seattle to Spokane) [redmondcyclingleub.org](http://redmondcyclingleub.org)  
**23** Chelan Century Challenge (Chelan) [chelancentury.com](http://chelancentury.com)  
**30** Red-Bell 100 (Redmond) [cascade.org](http://cascade.org)

### **July**

**7** S2S (Seattle to Spokane) [redmondcyclingleub.org](http://redmondcyclingleub.org)  
**14-15** Seattle to Portland/STP [cascade.org](http://cascade.org)  
**18-22** RedSpoke - Redmond to Spokane [redspoke.org](http://redspoke.org)  
**26** RAMROD (Mt. Rainier) [redmondcyclingleub.org](http://redmondcyclingleub.org)  
**28** Tour de Whatcom (Bellingham) [tourdewhatcom.com](http://tourdewhatcom.com)  
**28** Seattle Century [seattlecentury.com](http://seattlecentury.com)

### **August**

**4-10** RAW (eastern WA, ID) [cascade.org](http://cascade.org)  
**5** Ride the Hurricane (Port Angeles) [portangeles.org](http://portangeles.org)  
**11** Bellingham Urban Mayhem Ride "BUMR" (MBBC Club Ride)  
**19** Retro Ride (LaConner) Ken Rasmussen [kayakfit@fidalgo.net](mailto:kayakfit@fidalgo.net)  
**25-26** RAPSody - Ride Around Puget Sound (Tacoma)  
[rapsodybikeride.com](http://rapsodybikeride.com)

### **September**

**8** Whatcom County Farm Tour by Bike [sustainableconnections.org/foodfarming/whatcom-county-farm-tour-1/](http://sustainableconnections.org/foodfarming/whatcom-county-farm-tour-1/)  
**8-9** MS 150 Bike Ride (Mt. Vernon)  
**9** Mt. Baker Hill Climb (Glacier) [www.norka.us](http://www.norka.us)  
**9** High Pass Challenge (Packwood) [cascade.org](http://cascade.org)  
**16** Chuckanut Century (Bellingham) [chuckanutcentury.org](http://chuckanutcentury.org)  
**22** Tour de Whidbey (Greenbank Farm)  
**30** Kitsap Color Classic [cascade.org](http://cascade.org)  
**TBD** Skagit Valley Bicycle Farm Tour  
[festivaloffamilyfarms.com](http://festivaloffamilyfarms.com)  
**TBD** Fall Bike Festival (Winthrop) [www.mvsta.com](http://www.mvsta.com)

# everybody BIKE SUMMER Rides

**It's ON!**

## Summer Rides are back for 2012

After its successful inaugural year, the everybodyBIKE Summer Rides Series is back, bigger, and better. Mostly short, guided, social family rides, the series goes to interesting routes and destinations on various Sunday and Friday afternoons, May through August.

The series begins on May 6 at 1pm for a jaunt to some of the Bellingham Woods Coffee locations, and ends with the grand finale: the Woods to Woods coffee classic, with all of the Whatcom County Woods on the route, on August 26th.

New rides are being added in Ferndale, Birch Bay, and Lynden, so all of Whatcom County can get in on the fun. Watch the everybodyBike.com website for the final schedule, and get ready to ride in May!



calendar: continued from p. 3

### Trail work dates from Bellingham Parks Dept:

**March 3** - 10 am Pine Street Trail

**March 24** - 1-3 pm West Street Trail

**March 31** - 9 am Whatcom Creek Trail

information: Bellingham Parks & Recreation, 360-778-7105 and see directions to trailhead meeting places here:

<http://www.cob.org/documents/parks/volunteer/work-schedule.pdf>

### Classes & Training

**USA Fit Bellingham** is once again instructing triathlon training in preparation for the Lake Padden Triathlon on June 23.

- Training series starts: **March 28**.

[usafitbellinghamtri.com](http://usafitbellinghamtri.com)

**Bellingham REI** Cycling maintenance classes:

Bike Maintenance Basics: **March 19**;

Bike Maintenance 201: **March 25** [rei.com/stores/events/65](http://rei.com/stores/events/65)

**4 Mt Baker Bicycle Club - March 2012**

### Wellness Feature

## OVERUSE INJURIES...

Article 1 of 3

by Brian J. Weeda, MS, PT, AT  
Performance Physical Therapy

**Overuse injuries** often develop slowly. They can begin small as a nagging ache or pain and progress to a condition that limits your ability to properly partake in cycling. Overuse injuries are the result of imbalance in the body's ability to deal with the overload. This usually starts as an inflammatory reaction process, progressing to scar tissue formation with resultant imbalances in the body's musculoskeletal system.

Cycling injuries can be caused by environmental considerations, poor biomechanics, imbalance in muscle recruitment patterns, or a combination thereof. Common lower extremity overuse injuries in Cycling we often see in our clinic are:

- ◆ Metatarsagia (*forefoot pain*)
- ◆ Achilles Tendonitis
- ◆ Infrapatellar Tendonitis (*tendon below the knee cap*)
- ◆ Pathomechanis (*dysfunctional joint movement*) of the Patellofemoral Joint (*knee cap*)
- ◆ Lateral Hip Pain
- ◆ Low Back Pain

Environmental factors include but are not limited to:

- ◆ Improperly fit equipment (bike and gear)
- ❖ Proper bike and equipment fit is of primary importance and should be done by someone who really knows what he/she is doing. This can be an experienced rider, a Physical Therapist

*continued on p. 5*

**everybodyBike** Cycling safety and confidence classes: check the events calendar at [everybodybike.com/calendar.aspx](http://everybodybike.com/calendar.aspx) currently scheduled:

**March 8** *Buying the Right Bike*, 6pm at ReSources offices

**April 12** *Get Ready for BikeToWorkDay*, 6pm at ReSources

**May 10** *Bike Maintenance class for women*, 6pm at ReSources  
everybodyBike schedules bike skills presentations at elementary schools and events - call to sign yours up!

Spring Moles: 4/10-5/24 - just in time for Ski to Sea!  
Tue & Thu 6:45-8:15pm

Fairhaven fitness & tennis  
[bellinghamtennis.com](http://bellinghamtennis.com)

# CYCLE MOLES

Indoor Training and Outdoor Adventure

# OVERUSE INJURIES TO THE LOWER EXTREMITY – Environmental Considerations and Biomechanics.

*continued from p. 4*

who specializes in Bike Fits, or a qualified bike professional.

- ◆ Improper progression of exercise demand
  - ❖ If you're 19 - don't worry about this one.
- ◆ Improper warm up and cool down
  - ❖ Dynamic Warmup and prolong stretching post-cycling.
- ◆ Concurrent demands that overload the musculoskeletal system.
  - ❖ Going for an 8 mile run post ride?
  - ❖ Knowing your body's current physical tolerance and guidelines for proper progression of exercise demand is also key in avoiding overuse injuries

Poor Biomechanics (*Pathomechanics* - improper movement patterns of joints) often begins in the forefoot and heel areas with ground reaction forces affecting the kinetic chain up to the spine. This will cause abnormal joint reaction forces as well as alteration in how the muscle system is designed to work. The reverse can also occur - that is abnormal muscle recruitment patterns, muscle imbalances, and tension abnormalities can cause Pathomechanics. More on this topic in my next article.

The Dynamic Warm Up (DWU):

DWU ideally should last 15-20 min - About 1% of you may actually adhere to that requirement.

For the rest of us - here is my proposed **MINIMAL** DWU routine:

After 10 min. of gradual and progressive cycling demand:

1. Hop off the bike
2. High knees x 10 each side
3. High Kicks x 10 each side
4. High Knee Torso Cross Over x 10 each side
5. Walking Lunge with Torso Twist x 10 each side
6. Sumo x 10
7. Cobra x 10

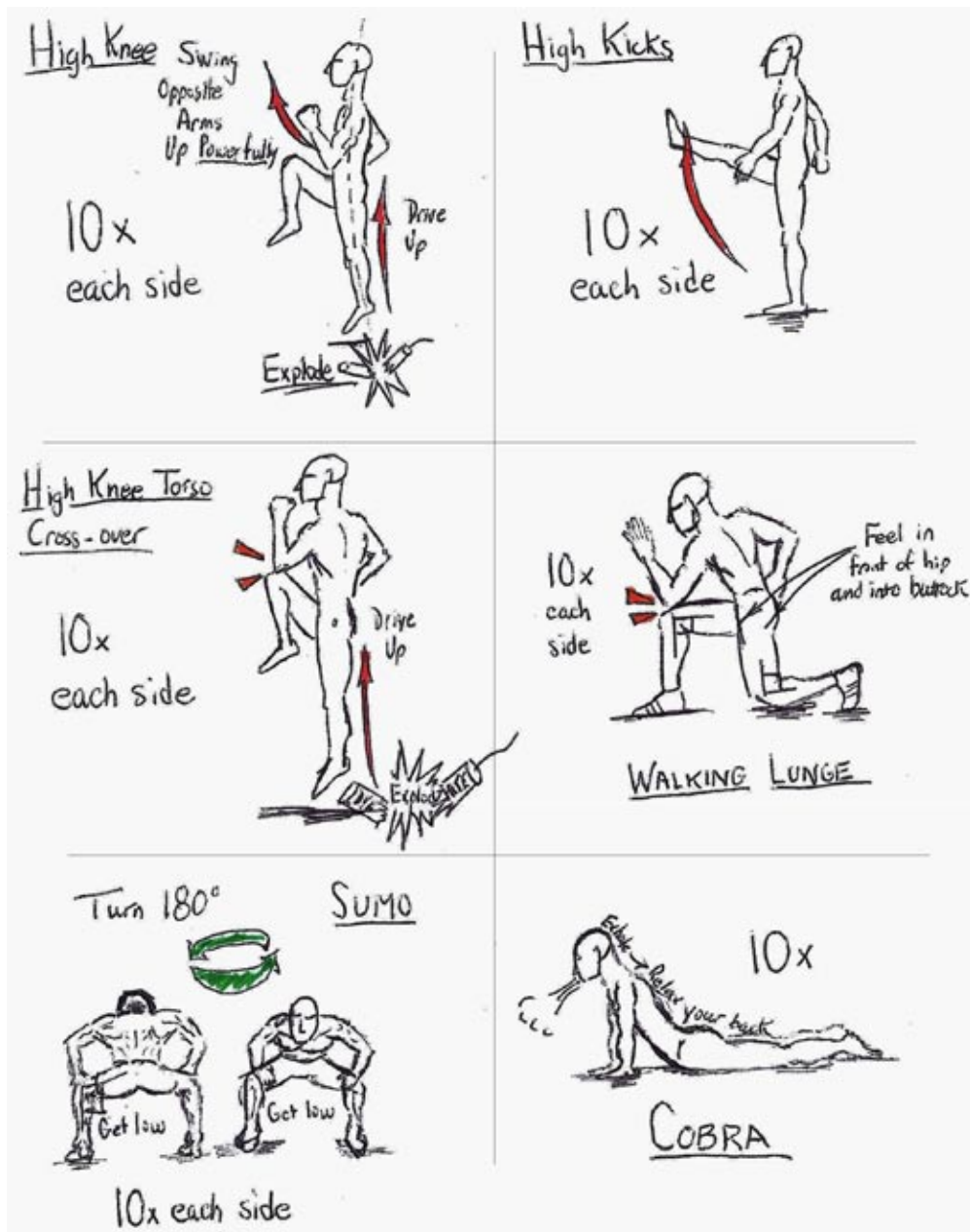
(See Diagrams for each at right)

Besides the reduction of over-use injuries demonstrated with a DWU program - it better prepares you for athletic participation.

The down time once a cyclist reaches my office for treatment can be up to 6 months - so let's stay out of the office! Next article will provide self treatment options for overuse injuries as well as additional tools to avoid them.



*Brian J Weeda, MS, PT, AT*







**Welcome new members!**

Gail Bertolini-Su

Lori Cucksey

Scott Groce

Dave Jones

Mike McQuaide

Chrissy Silvas

Ron Silvas

Frederick Su

**We're so glad to have you in the MBBC!**



## MBBC ADMINISTRATION

### Mt. Baker Bicycle Club

#### Board of Directors and Officers:

Marie Kimball - President; Patti Mullin - Vice President;  
Scott Dorough - Secretary; Tiffany Allen - Treasurer;  
Marc Ambers - Ride Coordinator;  
Doug Schoonover - Event Coordinator  
Ken Giffin, Bill McCourt, Eric Stromerson -- at large

#### Contacts:

Marie Kimball--bikebham@yahoo.com (656-5778)  
Doug Schoonover--  
ridecoordinator@mtbakerbikeclub.org (410-6431)  
Jennifer Longstaff--  
mbbcnewsletter@mtbakerbikeclub.org

#### Contribute to the newsletter: submission guidelines:

Contributions of articles, editorials, photographs, and artwork are welcome for inclusion in the newsletter. Anything related to bicycling will be considered; please discuss ideas with the editor in advance to reserve newsletter space or if you have questions. Final materials are due the last Friday before the last full week of every month, though earlier submissions are appreciated. Text can be submitted in any common format, for example: plain text, RTF, HTML, MS Word, etc. Please use JPG or TIFF format for photos, and ensure they are at least 250 ppi. Any articles may be edited for grammar, spelling, and space considerations.

Please notify the MBBC of upcoming cycling events for inclusion in the events list/calendar. Provide details plus contact information.

Email the newsletter editor:

mbbcnewsletter@mtbakerbikeclub.org, or drop a note to  
Editor, MBBC Newsletter; PO Box 2702; Bellingham WA 98227

## MBBC Membership Form

also available at: [www.mtbakerbikeclub.org/files/membershipform.pdf](http://www.mtbakerbikeclub.org/files/membershipform.pdf)

☐ New Member ☐ Renewing Member ☐ This is a change of address

Last name: \_\_\_\_\_ First name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Postal Code: \_\_\_\_\_

E-mail: \_\_\_\_\_

Contact telephone number: \_\_\_\_\_

Associate member: \_\_\_\_\_

(An associate member is any person living at the same address as the individual member)

I would like to receive my newsletter by (choose one): ☐ printed & mailed, or ☐ on-line

Would you like to help? Volunteers are our most valuable resource.

Please check any of the boxes that appeal to you and we will be in touch:

- ☐ Ride Leader ☐ Newsletter ☐ Board Member  
☐ Bike to Work and School Day ☐ Chuckanut Century  
☐ Special Events ☐ Website Maintenance ☐ Education  
☐ I can provide discounts on \_\_\_\_\_

#### Membership type:

Individual: \$15 \_\_\_\_\_

Family/Associate: \$25 \_\_\_\_\_

Additional Donation: \_\_\_\_\_

(donations support bike safety education)

**Total enclosed:** \$ \_\_\_\_\_

Please enclose a check payable to:  
Mt. Baker Bicycle Club

Mail to: Mt. Baker Bicycle Club  
Post Office Box 2702  
Bellingham, Washington 98227

## Build a Dynamo 36-hole Front Wheel; Part I. Lacing the Wheel

© 2012 by Frederick Su

see complete article, including many more photos of the process, on the MBBC Web Site:

[www.mtbakerbikeclub.org/news/dynamo1.pdf](http://www.mtbakerbikeclub.org/news/dynamo1.pdf)

**I** don't bicycle at night, but I do bicycle through dark, rainy Northwest winter days. A front light would be a useful safety feature.



So, why not have a light where electricity is generated through my own muscle power? Thus, the idea of building a front wheel with a hub dynamo was born. I had never built a wheel before. Now, I believe a front wheel build (easier than rear) is within the realm of expertise of the average home bicycle mechanic. Afterwards, you can say, "Wow! I built a wheel that generates electricity!"

I chose the SON28 2012 ([www.longleafbicycles.com](http://www.longleafbicycles.com) and [www.peterwhitecycles.com](http://www.peterwhitecycles.com)) since it is the best hub dynamo (Peter White has loads of information on dynamos and lights) and the Velocity Dyad because I wanted a touring rim.

Helpful references include *The Bicycle Wheel, 3rd Edition*, by Jobst Brandt, <http://sheldonbrown.com/wheelbuild.html>, and <http://sheldonbrown.com/rinard/spocalc.htm> for Damon Rinard's spreadsheet for calculating correct spoke lengths.

This is a 36-spoke wheel, built in 4 sets of nine spokes each. The first 2 sets are radial and inbound (defined later). The last 2 sets cross in a 3X pattern and are outbound. The spokes are DT Swiss stainless steel straight spokes, 2.0 mm in diameter, and 286 mm in length (calculated from Rinard's spoke calculator.) Spoke length is critical and depends on effective rim diameter and hub dimensions. Unsure about the length? Ask a bicycle mechanic. Get the length correct!

**Caution! Wear safety glasses when building a wheel! Spokes have been known to pierce eyeballs.**

**1.** (Skip if you use presta.) Many rims, including the Velocity Dyad, come with 6-mm diameter presta valve holes. If you use Schrader tubes like I do, you must ream this hole to 8 mm. (Harbor Freight sells a cheap well-made reamer.) Use tape to mark the 8-mm diameter depth on the reamer so you don't over-enlarge the valve hole **V**. Smooth the edges of the hole down with a small, fine round file.



**2.** This (left) is the SON28 2012 hub dynamo manufactured by Schmidt Engineering in Germany. It costs \$285. It has the least drag of any dynamo out there. It puts out ~3 watts, enough to power an LED front headlight and LED rear light. You can also hook up a charger, such as the E-WERK, to charge batteries for your electronic devices while riding.

**3.** You need a nipple driver to start the (usually) brass nipple onto the spoke threads. I suggest using an expanding slot blade screwdriver where the bifurcated blade can be expanded to fill the slot of the screw to hold it by friction. If you drop the nipple into the "black hole" of space between the top and bottom of the rim, you will have a difficult time retrieving it. Remember, it cannot be picked up with a magnet.

**4. First Set.** Inserting the key spoke. Mark the valve hole by putting a piece of tape above it. This is your reference mark, both as to where along the circumference of the rim you are and also which side of the wheel you currently have up. **1**, **V**, and **R** in the photo (see online) refer to the key spoke, valve hole, and view of right side of the rim, respectively. Hold the hub in your hand with one side of the rim on your lap and the other side on a table or chair. Drop 9 spokes into every other hole in the top flange. (Be sure to grease the threads of the spoke before inserting into the nipple.) Take one spoke (henceforth referred to as the key spoke) and connect it to a nipple pushed through the first hole left of the valve hole. This left hole should be offset upward toward the upper flange (step 5). Screw the spoke into the nipple so that about 1/2 of the threads are showing. (I start the nipple onto the spoke with the bifurcated screwdriver of step 3 and then switch over to a regular medium-size screwdriver for ease of turning.)

I chose to have the electrical connectors from the dynamo on the right side of the wheel. (It really doesn't matter, because when finished, I could just flip the wheel and have the electrical terminals on the left. The caveat is which way the tire treads run.)

**5.** Most modern rims have an offset for the spoke holes..  
...continued!




See Frederick's complete article, with all 19 instruction steps and photos (such as the one above, showing step 12) on our Web Site at:

[www.mtbakerbikeclub.org/news/dynamo1.pdf](http://www.mtbakerbikeclub.org/news/dynamo1.pdf)

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Part 2 of this series is coming up in April!

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
				<b>March 1</b> Edison Social Ride	<b>2</b>	<b>3</b> Donut Ride Mussels in the Kettles Bellingham Parks trail work party
<b>4</b> Edison Social Ride Bike Expo Day 2	<b>5</b>	<b>6</b> Ferndale am social ride	<b>7</b> Wed Group Ride Bike to Work/School Day planning mtg	<b>8</b> Edison Social Ride everybodyBike class: "Buying the Right Bike"	<b>9</b>	<b>10</b> Donut Ride Recumbent Ride Bike Expo Day 1
<b>11</b> <i>Daylight Time Begins</i> Edison Social Ride Ephrata Gran Fondo	<b>12</b>	<b>13</b> Ferndale am ride	<b>14</b> Wed Group Ride	<b>15</b> Edison Social Ride	<b>16</b> April MBBC Newsletter Deadline	<b>17</b> Donut Ride McClinchy Mile Bellingham St Pat's Parade
<b>18</b> Edison Social Ride	<b>19</b> REI: Bike Maint Basics	<b>20</b> <i>Spring Equinox</i> Ferndale am ride	<b>21</b> Wed Group Ride Bike Travelogue Slide Show	<b>22</b> Edison Social Ride	<b>23</b>	<b>24</b> Donut Ride Bellingham Parks trail work party
<b>25</b> Edison Social Ride REI: Bike Maintenance 201	<b>26</b>	<b>27</b> Ferndale am social ride	<b>28</b> Wed Group Ride USAFit 2012 Kickoff Meeting	<b>29</b> Edison Social Ride	<b>30</b>	<b>31</b> Donut Ride Bellingham Parks trail work party



### Mt. Baker Bicycle Club

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Welcome to Bellingham  
Now Get on Your Bike!  
[www.mtbakerbikeclub.org](http://www.mtbakerbikeclub.org)

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