



NEWSLETTER –Oct 14, 2020

www.gvrcycling.org

Contents

| | |
|---|---|
| Zoom Online General Meeting – Topic: e-bikes - October 14 th at 3pm via Zoom | 1 |
| Joanie’s Feed Zone -The Pumpkin Seed– by Joanie Rogucki | 2 |
| Knee Stretches for Cycling - By Jay Tapper | 2 |
| Links to Interesting Articles..... | 3 |
| LITHIUM ION BATTERIES by Bob George | 4 |

Zoom Online General Meeting – Topic: e-bikes - October 14th at 3pm via Zoom
Our first Zoom member meeting was held today at 3pm.

A recording of the meeting was uploaded to YouTube. Here’s a [LINK: https://youtu.be/gXGI6fIIHA](https://youtu.be/gXGI6fIIHA)
This link has been revised- the initial link published in the Newsletter failed.

- The board provided updates:
 - Hank discussed unknown timing and options for resuming in-person meetings.
 - Paid members = 79. We have more than \$500 in the treasury right now.
 - Membership lasts through Dec. 31 – based on the calendar year.
 - November is our meeting to reaffirm existing or vote in new board members.
 - Board meetings have been taking place.
 - Tom Wilstead is still accepting bike and bike supply donations for Bicas. Bicas is open by appointment for buying parts or bikes, but closed as a workshop.
 - GVR cycling may want to consider a bike workshop, similar to the clay studio or woodworking.
 - We need a NEWSLETTER EDITOR, please! Karen is merely doing copy and paste. Hank, Tom, Jay Tapper and Joanie have been excellent contributors. You can send your self-nomination for editor and your articles to gvrcycling@gmail.org.
- Panel Discussion on E-bikes
 - Dale Brokaw converted his favorite recumbent to an e-bike and made positive changes to his riding routine.
 - Bob George talked about optimizing battery life. You can find his article (below), including links to helpful sources.
 - Karen Rainford bought a Raleigh Misceo IE, (\$1800) and believes it’s made her a safer rider, and a better group and solo rider.
 - Curt Jackson wasn’t able to join – we’ll hear from him another time.

Joanie's Feed Zone -The Pumpkin Seed– by Joanie Rogucki
“The Pumpkin Seed: Small but Mighty”

The seed of the pumpkin is a tasty snack and portable. Lucky for us the seed is much more than a yummy snack.



A treasure trove of macro/micronutrients this mighty seed is rich in protein, zinc, magnesium, iron, phosphate, manganese, omega 3's, and so many more incredible nutrients.

You can buy them in the store or make a batch of your own. My husband bought them in bulk at sprouts (Pepitas). Pepitas are different than pumpkin seeds with similar nutrients. However, they come from hybrid pumpkins. These powerhouses lace my salads, my oatmeal and even top my muffins. Best of all they fit in my bike jersey and yes make a great snack!

BONUS: research shows pumpkin seed reduces inflammation found in oxidative stress. This chronic condition can be generated from physical activity. Your wellness toolbox should include pumpkin seed. Try it again for the first time.

Eat right, ride right.

Resources:

1)Roasting Pumpkin Seeds/Recipes: <https://youtu.be/kG3zGKuZiE4>

2)<https://www.youtube.com/watch?v=4DBs9AC7k8Q>

*Note: I have not used pumpkin seed oil nor recommend it. The attached video resource provides information if you are interested

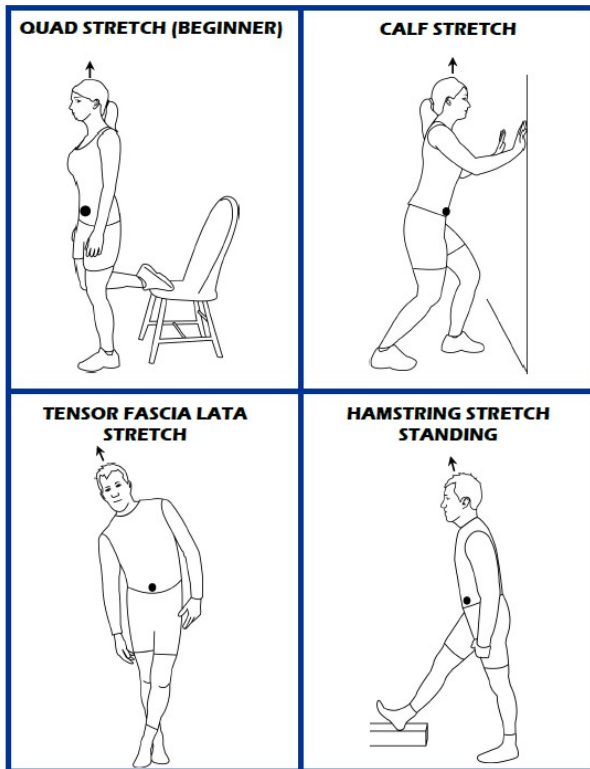
3)<https://thecookful.com/are-pepitas-pumpkin-seeds/>

Knee Stretches for Cycling - By Jay Tapper

It is important to stretch the muscles around the knee joint to stretch out the cycling and not cycling muscles. Unless you spend a lot of time out of the saddle your knee never really straightens in the cycling movement and never really fully bends.

The stretches below will help you maintain knee range of motion and muscle symmetry in your lower extremities to help your legs recover from cycling and prevent discomfort. The stretches can be done before and after riding and better yet during riding breaks.

To stretch the Quad which may be the most important muscle to focus on for cycling look for something that you can place your foot on behind you that will put a 90 degree bend in the knee. IF you do not feel a stretch bend the knee you are standing on. Read the stretching technique instructions that emphasize good posture and tight abdominals when stretching.



KNEE STRETCHING ROUTINE #1

Stretching improves joint range of motion, decreases muscle soreness and prevents injuries.

STRETCHING GUIDELINES:

- Maintain good posture (↑).
- Tighten abdominal muscles (•).
- Breath normally.
- Hold a light stretch for 15-20 seconds and repeat 2 times.
- Contact your supervisor if you have questions regarding any of the exercises.

SAFETY TIP:

“WATCH WHAT YOU ARE DOING”

Taken from ActivEdge training material by Jay L. Tapper • JLtapper@cpinternet.com Copyright ©2020

Links to Interesting Articles

- **People for Bikes** reported that the Rails to Trails Conservancy reported that since March, 2020, rides on rail trails have increased 75% vs the same time frame in 2019. Here's a link to more info from this group.
https://www.pfbkeepriding.org/#utm_source=PFBAemail1&utm_medium=email&utm_campaign=KeepRiding

- Gretchen Reynolds has written three good articles for the NY Times, partially available at this link: <https://nytlicensing.com/search/1a69f5a4/> You need to sign in the to NY Times to read the full stories.

- Trevor Raab, photographer at *Bicycling!* Wrote this short article about ebikes.

As a lifelong racer, I never expected this, but I have become a fan of e-Bikes. They're popping up everywhere in the bike world and you've probably seen post after post about the newest and fastest offerings. When first introduced to e-bikes I didn't think much of them, and yes, I've often bashed them. Sure, in cargo form they're handy for running little errands with ease or to go grab lunch down the street, but the experience on the trail or road was missed on me. But that all really changed the first time I grabbed one for my dad.

A little precursor here, my dad had a few years of random health issues that kept him off the bike, followed by the beginnings of kidney failure and dialysis, which left him with even less energy to get out and ride. Luckily, he recently was able to score a new kidney which has done wonders for his energy levels, but he's not quite ready to hop on a regular bike just yet.

That's where the e-bike comes in. He, too, seemed skeptical at first, but once he hopped on, he instantly had a smile. He began racking up the miles, excitedly telling me about where and how far he rode. E-bikes allow him to enjoy the ride again and accomplish new goals. Now we can share ride stories and even spend some time on the roads together. To me, that's truly showed me the benefit of a little bit of assistance in the form of a motor.

LITHIUM ION BATTERIES by Bob George

Presented at GVR Cycling meeting on Oct. 14th, 2020

Long Term Storage

Link to an excellent source:

<https://electricbike-blog.com/2017/06/02/what-a-good-idea-long-term-lithium-pack-storage-without-incurring-non-recoverable-losses/>

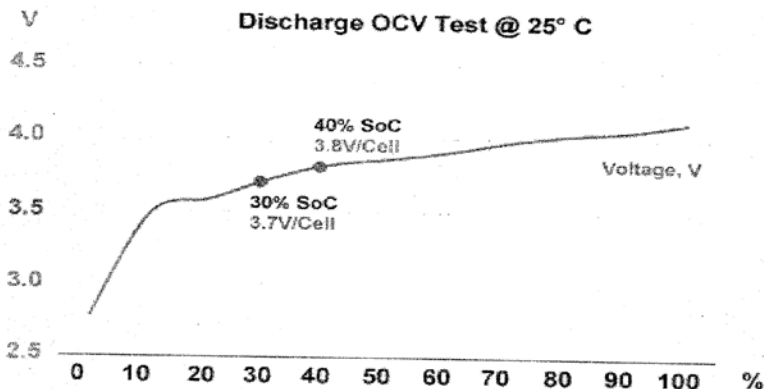
What voltage to store your pack at

The recommended voltage to store your pack at is 40-50% but for this article, I'm going to recommend that you store your batteries at 40%. If you have a 52v pack then store it at 53.2v, if you have a 48v pack store it at 49.4v. If you have a 36v pack store it at 38v.

When in doubt just charge the pack to around its nominal voltage for long term storage and it should be fine.

Every 6 months or so you should check your packs and charge them back up to 40%. Although I often let this process slip for about a year, you should make sure that whatever you do that you don't let the batteries slip below the LVC of the BMS for the cells otherwise your battery might go to sleep and never come back to life again.

Li-ion Discharge Plot



How To Extend Life of Battery

<https://www.electricbike.com/how-to-make-lithium-battery-last/>

Don't Charge to 100%

The amount of extra charge you get from charging to 4.2V per cell, instead of 4.1V? it is very small, and has very little effect on your range. You may think that charging to 100% will give you the maximum range possible, but it trades a significant amount of pack life for a very small amount of extra range. The

Luna Advanced charger allows users to charge their packs to 80% (4.05V per cell), 90% (4.1V), and also 100% (4.2V).

Avoid Heat

There are two ways I know of that you can reduce heat in a battery pack system design. First, use a larger battery pack than you need. You might only “need” a very short amount of range on your particular commute, but a bigger pack will run cooler, since each cell is less stressed at a lower amp-draw per cell.

The next way...is to specify a cell that has a higher amp-rating than you need. If you have a small battery pack that can provide your max amps needed (and it is also the biggest pack that will fit on your frame), but...it’s getting hot? You can buy a pack of the same physical size, but...with a higher amp-rated cell, and it would run cooler.

There are some days when you want to recharge your battery as fast as possible. For example, the Luna Advanced charger has the ability to charge at 5A, or...also at 3A. If you charge at 5A, the battery will charge faster, but...if you charge at the lower 3A rate, it will take longer, however...the 3A charging rate will also leave the battery pack less warm, and...the cooler the battery is, the better.

WHAT IS A BMS?

A BMS is a battery management System. While generally charging a Li-ion battery to only 80-90% of capacity will significantly increase battery life it is necessary to occasionally charge to 100% so that the BMS can balance the cells.

A BMS is defined as an electronic system that manages a rechargeable battery (single cell or battery pack) by monitoring its state, calculating secondary data, reporting that data, protecting the battery, controlling its environment, and/or balancing it.

RIDE SOLO AND SAFE



NEWSLETTER –Oct 28, 2020

www.gvrcycling.org

Contents

Annual Meeting Postponed **But** December Online Program Planned..... 1

GVR Cycling Program – Bicycle Safety December 16, 2020 3:00 PM AZ time 1

Recording of the Oct. 14 Member Meeting..... 2

Joanie’s Feed Zone - In honor of National Pumpkin Day - by Joanie Rogucki 2

Unicyclers Welcome by Tom Wilsted, Vice President 2

Neck Stretches for Cycling By Jay Tapper 3

Links to Interesting Articles..... 3

Year-Round Riding For Greater Fitness..... 3

Types of Bikes Explained..... 4

Why Do Bikes Stay Upright? 4

Designing Your Own Cycling Plan..... 4

Annual Meeting Postponed **But** December Online Program Planned

GVR bylaws require that all clubs hold their annual meeting in November. This requires a quorum of members where an election of officers takes place. At that meeting we would also confirm our dues level of \$10 per person per year. GVR has indicated that clubs can postpone their annual meetings due to the Covid-19 pandemic and the Cycling Club will wait to hold its annual meeting until early in 2021.

GVR Cycling Program – Bicycle Safety December 16, 2020 3:00 PM AZ time

However, the club has scheduled a cycling safety education program to be conducted by Elaine Mariolle, Pima County Program Coordinator for Bicycle Safety. Ms. Mariolle presented an exceptional program to one of the first cycling club meetings.

We are skipping the Zoom signup process -everyone is invited to join us using the link below. We will resend the link on Monday prior to the meeting. If you need help getting set up with Zoom, send an email to gvrcycling@gmail.com and one of our techies will contact you. You might want to paste the info below directly into your calendar.

Topic: GVR Cycling Member Mtg – Bicycle Safety

Time: Dec 16, 2020

Meeting starts at 3:00 PM AZ Time (MST). Link is open for testing and chatting from 2:30pm.

Recording of the Oct. 14 Member Meeting

Thanks for the great turnout for the member meeting on October 14. If you missed, you can find the recording at this link: <https://youtu.be/gXGI6fgIIHA>. Feedback on the meeting was positive, apparently, e-bikes are a hot topic. Many thanks to our e-bike panel: Dale Brokaw, Bob George, and Karen Rainford.

Joanie's Feed Zone - In honor of National Pumpkin Day - by Joanie Rogucki

I want to introduce you to this glorious orange orb. Yes, National Pumpkin Day is but once a year. However, packed full of nutrients and with many ways to add into the diet whether savory or sweet you will want to enjoy pumpkin year-round.

Do you want to add an energy boost with whole food for your long ride? Maybe you are cooking meals for you or family. Looking for a delightfully yummy and healthy dessert?

What's In A Pumpkin?

- Vitamin A
- Vitamin C
- Vitamin E
- Vitamin B5
- Fiber
- EFAs
- Potassium
- Zinc
- Iron
- Magnesium



This orange fruit (1) is your go to. Once canned as puree pumpkin (1) it has an amazing shelf life and provides a nutrient fist pump to any recipe. Did you know pumpkin can be used as a fat replacement in baked goods? NO WAY...YES WAY! (2) Ready for a snack during your ride, maybe a snack pre or post ride. The mighty golden globe marries well with oatmeal in a grab n go muffin. (3) Worried about calories/carbs pumpkin is a great solution enriching a dish even adding beneficial fiber. The fiber keeps hunger at bay while stabilizing blood sugars, reducing lows and highs. I start my day out with pumpkin added into my oatmeal every morning.

All aboard the "pumpkin train": no matter the season

ride the train regularly. Enjoy the variety.
Eat right: ride right.

- (1) <https://www.amazon.com/Farmers-Market-Organic-Pumpkin->
- (2) [http://dailyonefruit.com/pumpkin-is-a-vegetable/#:~:text=Pumpkin%20is%20a%20fruit%20or%20a%20vegetable.%20But,recipes%20as%20a%20side%20dish%20in%20Asian%20foods.](http://dailyonefruit.com/pumpkin-is-a-fruit-or-a-vegetable/#:~:text=Pumpkin%20is%20a%20fruit%20or%20a%20vegetable.%20But,recipes%20as%20a%20side%20dish%20in%20Asian%20foods.)
- (3) <https://www.thespruceeats.com/fat-substitutes-for-baking-1328528>
- (4) <https://healthyliving.azcentral.com/pumpkins-fiber-16921.html>

Unicyclers Welcome by Tom Wilsted, Vice President

On a recent Sunday morning I was driving south on Camino del Sol and saw a bicycle coming towards me in the biking lane. As I got closer I realized it was a woman on a unicycle not a bicycle. While we know there are lots of bi and tricyclers in Green Valley, there is apparently an underground group of unicyclers as well.

If you know any unicyclers, please let them know that they would be welcome members of the Green Valley Recreation Cycling Club. It would be great to have members riding on one, two or three wheels. If they want to join, please direct them to our website at www.gvrcycling.org or to this sign up link:





https://docs.google.com/forms/d/e/1FAIpQLSd_p9dVNk4Gccp-j_K0eUfY217_n_uqBOX5Jjs6y5DnslkK8Q/viewform

Neck Stretches for Cycling By Jay Tapper

Neck discomfort is quite common to cyclists. One of the keys to preventing neck issues is to make sure your bike is set up for your body type. A good bike fit will help eliminate unnecessary pressure and strain on the arms, shoulders and neck. And improve your cycling posture.

Good posture off the bike is also important as are neck stretches. People with poor posture when sitting or standing have a forward head position (also called a forward poking chin)! The forward head position causes tightness of the neck extensors even before a person gets on the bike. IF your neck muscles are tight before riding they are going to get even tighter as you ride.

So step one is to be aware of your posture in your daily activities. And step two is to incorporate the stretches below to improve your neck motion and reduce neck tightness. Stretch before your muscles get tight. So stretch early in your rides and throughout the day to avoid prolonged postures.

| | | |
|--|--|---|
| <p>NECK/SHOULDER STRETCH</p>  | <p>NECK STRETCH</p>  | <p>NECK STRETCHING ROUTINE #1</p> <p>Stretching improves joint range of motion, decreases muscle soreness and prevents injuries.</p> <p>STRETCHING GUIDELINES:</p> <ul style="list-style-type: none">• Maintain good posture (↑).• Tighten abdominal muscles (•).• Breath normally.• Hold a light stretch for 15-20 seconds and repeat 2 times.• Contact your supervisor if you have questions regarding any of the exercises. <p>SAFETY TIP:</p> <p>“STAY HYDRATED”</p> <p><small>Taken from ActiveEdge training material by Jay L. Tapper • JLTapper@cpinternet.com Copyright ©2019</small></p> |
| <p>SHOULDER STRETCH</p>  | <p>NECK STRETCH</p>  | |

Links to Interesting Articles

Year-Round Riding For Greater Fitness

If you take off the winter because it's too cold or the summer because it's too hot, here are some tips about how you can develop a year-round training plan: <https://www.roadbikerider.com/year-round-riding-for-greater-fitness-and-health-d3/>

Types of Bikes Explained

Did you ever wonder what the difference is between a gravel bike, a comfort bike or a Triathlon bike? The following link will take you to an article that explains and defines the different types of bikes in the cycling universe: https://www.bicycling.com/bikes-gear/a23067076/types-of-bikes/?source=nl&utm_source=nl_byc&utm_medium=email&date=101720&utm_campaign=nl21791558

Why Do Bikes Stay Upright?

Ever wonder why bikes stay vertical? John Stupak forwarded this video from YouTube that provides a number of explanations. If you want to learn more, click on this link: <https://youtu.be/oZAc5t2lkvo>

Designing Your Own Cycling Plan

Below is an article from the *Bicycling Newsletter* by cycling coach David Liscomb on how to develop a personalized cycling training plan:

Whether you are a beginner, amateur, or experienced pro, designing your own cycling training plan is a valuable skill. A balanced roadmap for success is where the rubber meets the road, so to speak. A plan will help keep you focused and pressing forward, especially on those days when you lack motivation to train.

Developing a cycling training plan is not just about scheduling workouts for a specific month, day of the week or time of day. It's also about factoring in the mental preparation needed to execute each workout, as designed.

Let's look at four C.O.R.E principles taken from my CIS Training Systems program "The Art of Cycling: A Six-Step MasterClass." These principles will provide a strong and sustainable foundation to any training plan.

C: Commitment to finishing what you have started.

O: Ownership of your training by making NO EXCUSES when rough patches occur.

R: Responsibility to hold yourself accountable for staying focused on the task at hand.

E: Excellence in performing to the best of your ability.

How to Build an Effective Cycling Training Plan

I'm guessing that many of you have heard or read somewhere that a training plan should include a mix of long endurance miles, interval training, speed work and power. You also may have heard or read that this combination will produce cardiovascular fitness, muscular adaptation and a myriad of other benefits.

Generally, this all is true. But here are some key considerations:

- Determining which month or weekday to perform these workouts – and in what order;
- how to effectively maintain cardiovascular fitness and strength throughout the year; and
- choosing the appropriate tactics that maximize the training effect within the required cycling time and deliver sustainable results

To help you build your training plan, I have outlined a five-phase approach. This is designed for cycling in seasonal climates native to the Northern Hemisphere. But cyclists in the Southern, Eastern and Western hemispheres also can apply the same training logic.

Phase 1: Transition

Mid-October to early November is the time to reset and give your mind and body a well-deserved break. Great alternative activities during this period include cross-country skiing, swimming, yoga, Pilates and low-intensity strength training.

Coaching Tip: Continue to train your body's aerobic and strength systems with low-intensity group rides that are less structured than usual. Make it fun to maximize the mental break.

Phase 2: Foundation

From early November through December, the focus is on preparing the body for a heavy training load. Incorporate weight training (2 to 3 times per week) while continuing to build endurance with low-intensity cycling.

Phase 3: Base

December through February is a critical period for adding longer endurance rides. This is a perfect time to include medium-intensity hill repeats to develop your body's aerobic and muscular endurance.

Coaching Tip: Reduce weight training to twice a week, as training fatigue will increase, and you will need more rest and recovery.

Phase 4: Integration

From March to September, slowly introduce longer training sessions and more specific, disciplined training – intervals, hills, sprints, time trials or extended efforts. This is the most intense phase – and the longest – so it will be essential to schedule rest and recovery periods.

Coaching Tip: Maintenance activities such as massage therapy, yoga and pilates are excellent sources of physical and mental recovery during this phase.

Phase 5: Off-Season Transition

In the first two weeks immediately following Phase 4: Integration, you will focus on recovery and rejuvenation both mentally and physically. Take full advantage of this time off the bike and unplug!

The Importance of Rest Days

I can't stress this enough – including rest days in your training plan is critical. The harder you train, the more rest you require. Muscles break down during exercise and rebuild during rest. If you don't plan for rest days, you never allow your muscles to rebuild and you won't get stronger.

What is rest?

Exactly what you think it is! Take the day off from your bike (I recommend Mondays), physically and mentally. Sleep in a bit longer or take a midday cat nap. Kick your feet up and binge watch Netflix. Take a leisurely walk. Meditate. I chill out by soaking in an Epsom salt bath.

As Felicity Luckey, author of the book *Great Minds Think Fit*, wrote, "Belief in yourself and your cycling goals is the ignition switch that gets you off the sofa and onto your bike."