Tailwind Express

2018 Spring Edition

The Club with a place for every pace.

annapolisbicycleclub.org

ABC Officers

President: Jim Black
abc_pres@annapolisbicycleclub.org
Vice President: Jim Minor
abc_vp@annapolisbicycleclub.org

Treasurer: James Edison
treasurer@annapolisbicycleclub.org

Web Master: Jim Black
webmaster@annapolisbicycleclub.org

Tailwind Editor: Sandi Delcore, David Bleil
editor@annapolisbicycleclub.org

Inside this issue:

President's Column

Winter is finally over and done with, at least, in my opinion, so let the rides begin! Check out the ride calendar (page 3, and on the website) for some fun upcoming rides!

This edition of the newsletter is jam packed with trivia, fun facts, and articles of interest. I guess we are running short of quality pictures now that our primary photographer, Susan, has moved on. Which reminds me—TAKE PICTURES! We love to post pictures of rides, happy hours, and interesting trips and adventures, and I would bet that's your favorite thing to see in the Newsletter as well!

Also, remember the Skills Workshop on May 12. See details below.

Cycling Skills Workshop Saturday May 12, 2018

Many of us have been riding our bikes for years while some of us are relatively new to riding. We've spent who knows how many thousands of dollars on our bicycles, and equipment such as helmets and shoes. And clothing. And tune-ups and repairs. And accessories, not to mention event rides. Maybe the least expensive items in road cycling are water bottles and socks...maybe, unless you purchase one inner tube or a patch kit.

In the past some of us have experienced accidents and injuries that could have been prevented with education on technique and practice. Many sports have "the fundamentals" players practice; cycling does too. Most advanced cyclists routinely do handling drills to keep their skills at peak levels. However, most of us aren't interested in practicing skills when we could ride to Deale or in the Seagull. Still, a little technique and practice go a long way. Regardless of how many years you've been riding or what your skill level is, there's always something we can do to make cycling better, more efficient and safer for ourselves and those we ride with.

ABC will host a bicycle handling skills workshop for riders of *all skill and experience levels* on Saturday, May 12th at Quiet Waters Park in Annapolis. Professional coaches will demonstrate proper techniques and will guide us through skills practice at low speed for safety and confidence building. If conditions permit we will also do grass drills. Practicing in the parking lot allows to focus on skills and not having to worry about cars, debris or potholes. Best of all the cost is only $20. It's like going to bike camp in your backyard. See the agenda and drills we'll cover below.

It isn't any specific drill or ability that makes you better, it's the overall result of the practice that improve your dexterity and agility on the bike; you become more confident and relaxed which makes you stronger and faster because you are more efficient in maneuvering your bike.

Whether you are new to cycling or have been riding for years set yourself up for success and safety by signing up for this workshop. Try buying a new jersey, shoes or helmet for $20.

Workshop location: Quiet Waters Park - Sassafras Pavilion
Date Saturday, May 12th from 9am-1:30pm
Cost $20 per person (includes lunch) *Participation in this event has been opened up to the pubic via BikeAAA*
Our instructors are USAC Coach BJ Basham and USAC Coach James Schaefer. Click on link for info about coaches.
ABC contact for this event is James Edison at james.edison@yahoo.com
For agenda and drills see ABC Bicycle Handling Skills Workshop

BikeAAA

BikeAAA is an all-volunteer 501c3 non-profit focused on creating a healthier, more livable Annapolis and Anne Arundel County by promoting safe bicycling for transportation, recreation and fitness. We represent more than 700 members and advocate for better bicycling conditions and transportation choices; and educate children, adults, and motorists about safe bicycling. (Membership in ABC automatically gets you membership in BikeAAA.) For an update of recent accomplishments and activities, please read our BikeAAA 2017 Annual Report.

May is National Bike Month and we have several events coming up following very successful events in 2017 including more than 1,000 children riding on Bike to School Day, the Ride of Silence and Bike to Work Day! Check out our EVENTS page and CALENDAR for upcoming events!

BikeAAA is the voice for biking in the county! See recent NEWS.

Click for an update on the very successful session for 2017 Maryland bike safety legislation with 3 bills passed into law. We are now in the 2018 session following through on the Maryland Bike Safety Task Force recommendations which included BikeAAA reps Jack Keene and Jon Korin.

BikeAAA Calendar

May 5 10AM - 2:30PM **B&A Trail Planet Walk/Bike (Earleigh Hgts to Aquahart Rd)**

May 9 **National Bike to School Day**

May 16 630pm **Ride of Silence (Germantown E.S., Annapolis)**

May 18 **Bike To Work Day (Various locations; Main event in Annapolis 8AM)**

Jun 18-22 iCan Shine Bike Camp for Kids with Special Needs: Please VOLUNTEER

June 21-25 **Race Across America Finish in Annapolis!**

June 23 **Komen Promise Ride (Edgewater)**

Aug. 11 **Kenzie Rose Youth Tri (Kinder Farm Park)**

Oct 7, 2018 **5th Annual Lifeline100 Bicycle Event Earlybird Registration Open!**

Click to see BikeAAA's **online calendar** for the above events and more!

The club with a place for every pace.

Upcoming Rides/Events

Refer to the Events calendar on the ABC website (http://annapolisbicycleclub.org/) for all events, dates, times, happy hour specials, etc.

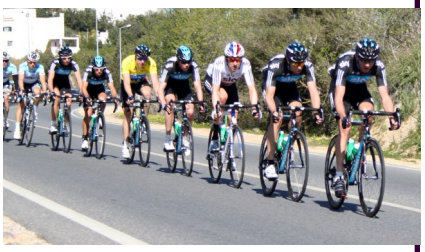
In the event that a ride is canceled or postponed, the ABC Communications Officer will try to keep everybody informed as to the status of rides, but you might want to make a habit of contacting ride leaders prior to rides with questionable weather forecasts.

Weekday rides—Tuesdays/Thursdays, 9:00AM Generals Highway Corridor Park

— Wednesdays, 5:30PM Dixon Aircraft Observation Area parking

Weekend rides—Saturdays, 9:00AM Davidsonville Park (55-mile, 16-17MPH ride)

— Saturdays, 9:00AM Davidsonville Park & Ride (30-mile, 14MPH NO DROP)



May 5, 2018, 7:00AM Six Pillars (37, 56, 100-mile options), Cambridge, MD

May 6, 2018, NYC Five Boro Bike Tour

May 11-13, 2018, Alpine Weekend at Deep Creek Lake—contact John Tyrell for more information, ~~johnctyrell@gmail.com~~. JohnCTyrrell@gmail.com

May 12, 2018, 7:00AM Iron Furnace fifty (50K, 50-mile, 100K options), Snow Hill, MD

May 12, 2018, 9:00AM ABC Bicycle Handling Skills Workshop, Quiet Waters Park—Sassafras Pavilion

May 16, 2018, 6:45PM Ride of Silence, Germantown Elementary School, Annapolis, MD

May 18, 2018, 8:00AM Bike to Work Day

May 19, 2018, 7:00AM Shorebirds Metric Century, Parsonsburg, MD

May 20, 2018 8:00AM Delaware Gran Fondo & Governor's Ride, Wilm., DE

May 25-28, 2018 Kent County Spring Fling, Chestertown, MD

June 2, 2018 Soar for Veterans cycling event, Easton, MD

June 3, 2018, Maryland Tour de Cure (12, 30, 63-mile options), Baltimore, MD

June 7-10, 2018 TrailWerks/TakeAim Trail House (mountain biking)

June 9 2018, 7:00AM Patuxent River Rural Legacy Bicycle Ride, Upper Marlboro, MD

June 16-17, 2018 Bike MS: Chesapeake Challenge, Easton, MD

June 23, 2018 Komen Maryland Promise Ride, Edgewater, MD

June 24, 2018 Bay to Bay Ride, Betterton, MD

Whew—and that's just May and June! Check the website for rides beyond June

TTGTs:

- May 17—Houlihans, Waugh Chapel
- June 21—Ellie's Place, Millersville

Rolling through the revolution*: a bike tour in Cuba
by David Bleil

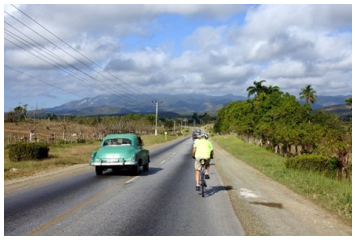
If you are a U.S. citizen and want to ride in Cuba you must go with a tour organized for people to people contact. Canadian citizens do not seem to have this rule. There are a few U.S. tour groups providing biking in Cuba. They share a pool of bikes, TREK FX S4s, hybrid style bikes suitable for Cuban roads and off-road riding. The tour company I chose was Wilderness Voyageurs located in Ohiopyle, PA. [See the Adventure Cyclist magazine Vol 44, No.9 and other back issues for a couple of other stories about biking in Cuba]

The tour started and ended in Havana. Havana traffic is rather chaotic and the street plan is the same. The tour started us riding well out of town headed west-northwest toward Playa Larga at the head of the Bay of Pigs.

Playa Larga is a beach resort where most of the homes are bed and breakfast accommodations to compensate for the lack of hotels. This is the pattern throughout Cuba outside of the larger cities. We visited the museum at Giron celebrating the victory of the Cuban people over the attempted invasion by CIA backed dissidents at the Bay of Pigs.

We had a partial day of snorkeling on coral reefs in the Bay full of colorful reef fishes, then back on the bikes and headed toward Remedios. Outside of the urban areas the roads were delightfully free of vehicular traffic. Since 2011 Cubans have been permitted to buy and sell cars and the roads are a mixture of modern European cars, Chinese buses and trucks and fifty plus year old American cars which seem to burn as much lube oil as gasoline.

The terrain was rolling and a mix of greens and brown in the agricultural countryside as April is near the end of the dry season. From Remedios we rode to Sancti Spiritus, founded in 1514, one of the original villas of Spanish Cuba. After checking into our accommodations, we spent the late afternoon walking through the city and visiting the museum of the Guayabera, Cuba's traditional shirt and sometimes referred to as the Puerto Rican tuxedo.)



Riding out of Sancti Spiritus we encountered the first rain of the trip. Just about the time we were all soaked and looking for building overhangs to hide under the rain stopped and we soon dried out as the day warmed. It kept warming, reaching 92 degrees as we headed into the Escambray mountains. In 1959 this area was a hideout for insurgents opposed to the rule of Fidel Castro. Now it is the place, the only place, where we stopped to buy ice cream along the way.

The Escambray mountains were not particularly high or rugged as we followed the main road up and over. There were three consecutive pitches of similar steepness the hill on Ridge Rd. separated by rollers with a bit more up than down. We refilled our water bottles several times on that climb in that heat. I had left my ABC sleeves at home thinking it would not be cool enough to need them but forgot about sun protection. I had to borrow a pair.

At the top we were met with a mounted police officer with a portable radio and a lasso but no visible gun. The ride down into Trinidad was smooth and quick. Trinidad is a 16th Century World Heritage site. There are no cars in the city but horse drawn cabriolets serve those tired of walking the cobblestone streets. After sunset, when the air cools down, Cubans, and tourists come out to dance in the plaza with several local bands providing lively salsa rhythms. Cubans seem to love to dance. It is essentially free entertainment. Most younger Cubans have cell phones or tablets. Every town has a WiFi hotspot in the central plaza. One has to buy an access card to use it for a fixed period of time. Every evening the plaza is filled with young people staring at their illuminated phones. That is the expensive form of entertainment.

The road from Trinidad to Cienfuegos runs along the coast wonderfully scenic and flat. Land crabs live in the mangrove forests and cross the highway to reach the ocean to mate. Even though there is little traffic the road is caked with the carapaces of crushed crabs. We managed to avoid most of them even though they are quick and highly erratic.

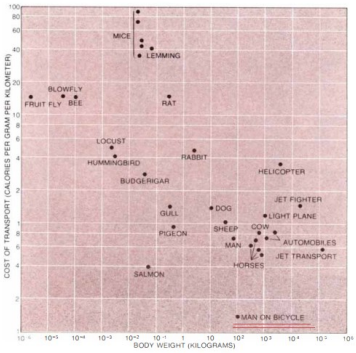
Cienfugos is a port city more modern and attractive then Havana in my view. There are privately owned and managed hotels as well as 20th century palaces. We took advantage of the amenities of an international Yacht Club to go kayaking the morning before we packed up the bikes and rode the bus back to Havana. I can hope that the current travel restrictions will be eased in the near future. This is a place I want to come back to and ride the rest of the country.

* The word revolution has quite different meanings to Cubans and Americans. They see it as a label for their form of government rather than an ongoing action.

Why are bicycles so useful?

Bicycles are so useful because of their extremely high efficiency when combined with a human cycler.

There is nothing more efficient than a human on a bicycle. There was a study of efficiency done by S.S. Wilson who was an engineering lecturer at Oxford, published in Scientific American in 1973 that even blew Steve Jobs' mind. In the study, Wilson found that a person on a bicycle was more efficient than any other animal or machine. Ever.



MAN ON A BICYCLE ranks first in efficiency among traveling animals and machines in terms of energy consumed in moving a certain distance as a function of body weight. The rate of energy consumption for a bicyclist (about .15 calorie per gram per kilometer) is approximately a fifth of that for an unaided walking man (about .75 calorie per gram per kilometer). With the exception of the black point representing the bicyclist (*lower right*), this graph is based on data originally compiled by Vance A. Tucker of Duke University.

A cycling human uses 1/5th the energy as one walking; 0.15 calory per gram of bodyweight per kilometer for biking, as compared with 0.75 for walking. (Bicycling Science, S.S. Wilson, Scientific American, March 1973)

Also, casual cyclists travel about 9-12 mph while a person walking travels about 3 mph. This results in cyclists being 15-20x more efficient than a person walking (per hour) and about 5 times more efficient than them most efficient animal, the American Condor.

Also the bicycle as a machine did more to spur the evolution of the automobile than any other product.

"I just started peeling back all the individuals who automobile historians treat as their founding fathers. And they all had bicycling backgrounds. You just peel back their histories and lo and behold: they started in cycling… Politically powerful 19th-century cyclists created road infrastructure in the U.S. and Europe—and many of them went on to lead the fledgling automobile industry." -Carlton Reid

"It is worth asking why such an apparently simple device as the bicycle should have had such a major effect on the acceleration of technology. The answer surely lies in the sheer humanity of the machine. Its purpose is to make it easier for an individual to move about, and this the bicycle achieves in a way that quite outdoes natural evolution. […] For those of us in the overdeveloped world the bicycle offers a real alternative to the automobile, if we are prepared to recognize and grasp the opportunities by planning our living and working environment in such a way as to induce the use of these humane machines." - S. S. Wilson

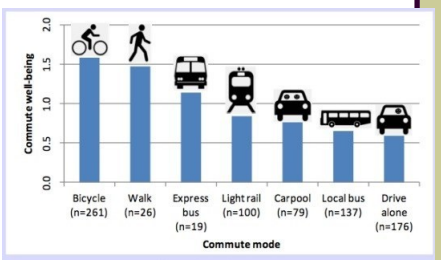


Fig. 3. Variation in commute well-being by mode

Philosopher Ivan Illich reflected on the benefits of the bicycle after being inspired by S.S. Wilson's article:

"Bicycles let people move with greater speed without taking up significant amounts of scarce space, energy, or time. They can spend fewer hours on each mile and still travel more miles in a year. They can get the benefit of technological breakthroughs without putting undue claims on the schedules, energy, or space of others. They become masters of their own movements without blocking those of their fellows." -Ivan Illich

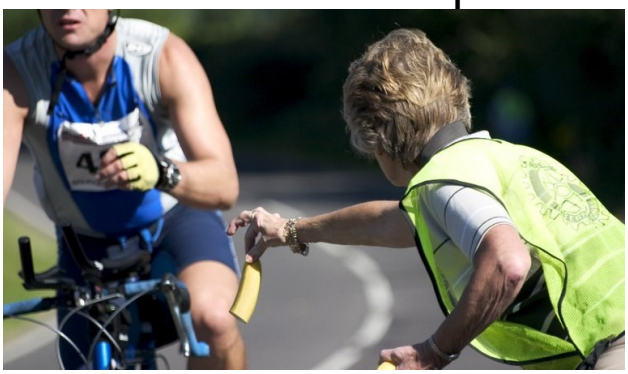
Illich also noted that average traffic speeds during rush hour are usually less than 8 mph. Average bicycle speeds are 9.6 mph. So in this case biking is actually faster than driving, especially in cities such as L.A. or Austin, Texas.

And finally, Steve Jobs analogued that what bicycles did for transportation computers will do for the mind:

"I read a study that measured the efficiency of locomotion for various species on the planet. The condor used the least energy to move a kilometer. And, humans came in with a rather unimpressive showing, about a third of the way down the list. It was not too proud a showing for the crown of creation. So, that didn't look so good. But, then somebody at *Scientific American* had the insight to test the efficiency of locomotion for a man on a bicycle. And, a man on a bicycle, a human on a bicycle, blew the condor away, completely off the top of the charts. And that's what a computer is to me. What a computer is to me is it's the most remarkable tool that we've ever come up with, and it's the equivalent of a bicycle for our minds." -Steve Jobs

And now we can meld human, bicycle, and computer together as one. We just need this: All Aluminum Phone Holder

Bananas vs. Sports Drink? Bananas win Study



A banana might reasonably replace sports drinks for those of us who rely on carbohydrates to fuel exercise and speed recovery, according to a new study comparing the cellular effects of carbohydrates consumed during sports. It found that a banana, with its all-natural package, provides comparable or greater anti-inflammatory and other benefits for athletes than sports drinks. But there may be a downside, and it involves bloating.

For decades, athletes and their advisers have believed, and studies have confirmed, that eating or drinking carbohydrates during prolonged exertion can enable someone to continue for longer or at higher intensities and recover more quickly afterward than if he or she does not eat during the workout. The carbohydrates rapidly fuel muscles, lessening some of the physiological stress of working out and prompting less inflammation afterward.

The most digestible and portable form of carbohydrates is sugar, whether glucose, fructose or sucrose, and for athletes, this sugar frequently is provided through sports drinks. But sports drinks are not a substance found in the natural world. They are manufactured and can contain flavorings and chemicals that some people might wish to avoid.

So a few years ago, researchers at the North Carolina Research Campus of Appalachian State University in Kannapolis, began to wonder about fruits as a healthier alternative to sports drinks during exercise. Most fruits, including bananas, are sugary and high in fructose; fructose, after all, means fruit sugar. But they also contain other natural substances that might have an impact on sport performance and recovery, the researchers speculated. In a preliminary experiment, published in 2012, the scientists found that cyclists performed better during a strenuous bike ride if they had either a banana or a sports drink compared to only water. They also developed lower levels of inflammation in their bodies afterward.

But that study had left many questions unanswered, particularly about whether and how the carbohydrates might be aiding athletes' recovery.

So for the new experiment, which was published last month in PLOS One, the researchers decided to use more sophisticated techniques to track molecular changes inside cyclists' bodies. (Dole Foods, which sells bananas, partially funded both studies. According to a statement in the study, the company did not have any involvement in "the study design, data collection and analysis, decision to publish or preparation of the manuscript.")

The researchers asked 20 competitive cyclists, male and female, to complete a grueling 47-mile (75-kilometer) bike ride on several occasions at the campus performance lab. During one ride, they drank only water. In the others, they had water, but also eight ounces of a sports drink or about half of a banana every 30 minutes. The scientists drew blood before the workout, immediately after, and at several additional points, stretching out to 45 hours later. They then checked the blood for markers of inflammation and levels of hundreds of molecules, known as metabolites, that can change during and after exertion and signify how much stress the body feels. They also isolated blood cells to look at the activity of certain genes involved in inflammation. As they had expected, the scientists found that swallowing only water resulted in relatively high levels of inflammatory markers in the riders' blood. These markers were much lower if the cyclists had consumed fruit or the sports drink. The volunteers also showed less-stressed metabolite profiles if they had had carbohydrates during their rides, whether those calories had come from a bottle or a banana.

But there were differences in the activity of some genes. In particular, the scientists found that the riders' blood cells produced less of a genetic precursor of an enzyme known as COX-2 if they had eaten bananas during their workout. This effect was not seen if they had drunk the sports drink or only water. The COX-2 enzyme prompts the production of prostaglandins, which, in turn, intensify inflammation. Less of the genetic precursor in cells after a workout should mean less COX-2 and reduced inflammation, says David Nieman, the director of the human performance lab at Appalachian State University and the study's lead author. He points out that anti-inflammatory drugs such as ibuprofen work by inhibiting COX-2, but, until now, researchers had not considered that bananas might perform comparably.

How the fruit manages to affect the cells' gene expression after exercise is still not known, however, he says. He and his colleagues also do not know whether half of a standard banana every 30 minutes is the ideal amount of the fruit during exertion. Although it provided as many carbohydrates as in a cup of the sports drink, it also resulted in "quite a bit of bloating," he says, which might dampen some athletes' enthusiasm.

He and his colleagues plan to explore those issues in future studies and also look into the effects of other fruits. "Dates have even more sugar than bananas," Dr. Nieman says.

In the meantime, he says, for exercisers who might prefer a natural, inexpensive and neatly packaged alternative to sports drinks, "bananas look pretty good."

How Exercise Can Keep Aging Muscles and Immune Systems 'Young'

Remaining physically active as we grow older could help to keep our muscles and immune systems robust, according to two inspiring new studies of older recreational cyclists. Together, the experiments add to growing evidence that some of our assumptions about aging may be outdated and we might have more control over the process than we think.

Aging often seems inexorable and unvarying, and, in chronological terms, it is. The years mount at the same pace for each of us. But our bodies' responses to the passage of time can differ. While most people become frail, a few remain spry. These differences recently prompted a group of British scientists to wonder whether our beliefs about what is normal and inevitable with physical aging might be limited or incorrect, and in particular, whether we might be ignoring the role of exercise.

Exercise among middle-aged and older adults in the Western world is rare. By most estimates, only about 10 percent of people past the age of 65 work out regularly. So, our expectations about what is normal during aging are based on how growing older affects sedentary people. But the British scientists, many of them recreational athletes, suspected that exercise might have an impact on the trajectory of physical aging and, if so, alter our beliefs about what "normal" aging means.

To test that possibility, they decided to seek out a group of older men and women who had remained physically active as they aged and found them among local recreational cyclists. The dozens of male and female riders they eventually recruited were between the ages of 55 and 79, had been cycling for decades, and still pedaled about 400 miles per month. None were competitive athletes.

For their inaugural study of the riders, which was published in 2014, the scientists measured a broad range of the cyclists' physical and cognitive abilities and compared them to those of sedentary older people and much younger men and women. The cyclists proved to have reflexes, memories, balance and metabolic profiles that more closely resembled those of 30-year-olds than of the sedentary older group.

That analysis had left many questions about exercise and physical activity unanswered, however. So for the two new studies, which were both published in Aging Cell this month, the researchers decided to refocus their inquiries and look closely at muscles and T cells, a key infection-fighting component of our immune system.

In most people, muscle health and immune response worsen after we arrive at middle age, with the effects accelerating decade by decade. But there had been hints in the first study's data that the cyclists might be unusual in these regards.

So for one of the new studies, the researchers turned to muscle tissue that already had been biopsied from the legs of 90 of the riders. They wanted to compare various markers of muscle health and function across the riders' age span. If the muscles of riders in their 70s resembled those of riders in their 50s, the scientists reasoned, then their physical activity most likely had altered and slowed the supposedly "normal" arc of muscular decline.

At the same time, other scientists delved into the riders' immune systems, drawing blood from them, as well as from a group of sedentary older people and another of healthy young adults. The two sets of scientists then dove into their data and both concluded that older cyclists are not like most of the rest of us. They are healthier. They are, biologically, younger. Their muscles generally retained their size, fiber composition and other markers of good health across the decades, with those riders who covered the most mileage each month displaying the healthiest muscles, whatever their age. The impacts on riders' immune system also were marked. In the older sedentary people, the output of new T cells from the thymus glands was low. The inactive older peoples' thymus glands also were atrophied, compared to those of the younger group.

The aging cyclists, on the other hand, had almost as many new T cells in their blood as did the young people. Those who exercised also showed high levels of other immune cells that help to prevent autoimmune reactions and of a hormone that protects the thymus against shrinkage.

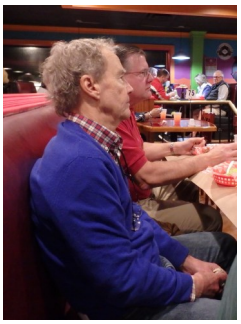
The researchers theorize that the results of the two studies are interrelated. Muscles are one of the sources of the hormone that protects the thymus.

"So more muscle means more of that hormone," says Janet Lord, the director of the Institute of Inflammation and Aging at the University of Birmingham, who was a co-author of both studies.

The older cyclists' immune systems were not impervious to aging, of course. Many of their existing T cells showed signs of senescence, which means that they had grown feeble and were unlikely to fight infections well anymore.

The results also are limited to recreational British cyclists. They cannot tell us if other types and amounts of physical activity would necessarily have the same effects or whether someone could begin exercising at, say, age 60 and expect to benefit to the same extent as someone who has exercised lifelong.

Fat Boys Crab House, 2/15/2018



Frisco's Taphouse,

HR HAPPY HOUR

Submit your own pictures and stories to the Tailwind Editors:
Sandi Delcore,
David Bleil
editor@annapolisbicycleclub.org

P.O Box 224
Annapolis, MD
21404

Questions? Email
abc_pres@annapolisbicycleclub.org

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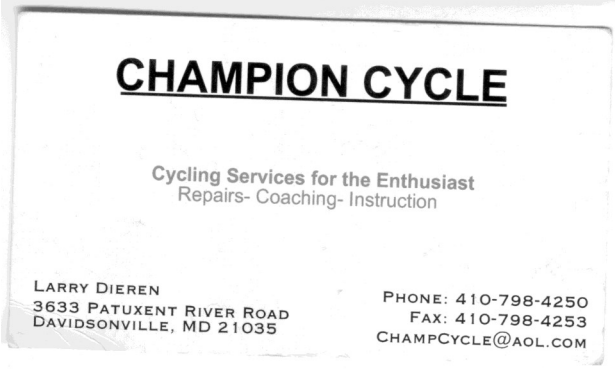
Page 9 - Club Sponsors and Professional Interests

ABC members get 10% off purchases at Bike Doctor—Crofton. Go talk to Ernest about lights for your bike or a new MIPS helmet!



Spring is the time to take your bike in for its yearly check-up. Schedule an appointment today with Larry Dieren. Larry is sure to give you a great deal and ensure your bike is ready for the 2017 biking season!
