Pushing the Limits

John La Porte

"It’s fascinating to see what the human body is capable of."

So says Marshall Ulrich of Fort Morgan, Colo., and in the case of the 1974 UNC graduate, the human body is capable of a great deal indeed.

Ulrich has been nominated for Ultra Runner of the Year (1989), has been the first man to ever run all six major 100-mile races in the United States, and has been near the front of the field in a number of major ultra-distance events.

He has been running since 1980 and in ultra-distance events since 1983.

However, he did not get into the longer "ultras," 100 miles and up, until entering the 1987 Western States 100 in California.

He finished 61st in 22 hours and 36 minutes — and was hooked on the lure of ultra-distance running.

That first 100-miler put him in elite company, since anyone finishing the race in less than 24 hours gets a silver belt buckle. At the time he received his, there were fewer than a thousand of them in the world.
He found that longer distances suited him well — and tested him in a way to gain self-satisfaction he'd never known before.


Since then, he has remarried. He is owner of Fort Morgan Pet Foods, which processes meat for pet food, and his wife, Danette, is a Fort Morgan art teacher.

The Ulrichs have three children — Elaine, 12, Taylor, 7, and Alexandra, 1.

Danette accompanies him, sometimes along with one or more of the children, to some races.

Whether it is part of the family, some friends or both, a good crew is essential to the success of an ultra runner.

Ulrich credits Danette with tolerating the long hours of training and going along to some races — and friends with giving up weekends here and there to go to races, getting up at odd hours (for example, 2 or 3 am is typical at the Leadville Trail 100), dashing to a dozen or more points along a race course to provide food, drink and other essentials and waiting for long periods of time for him to reach those points.

His wife has to put up with a good deal of training too — he runs 12 miles four days a week, plus about 20 on Wednesdays, 20 to 25 Saturdays and 25-50 Sundays. The longest training runs can go from five hours or less on the flats around Fort Morgan or six hours or so on hillier terrain.

He builds from a 100- to 110-mile a week base six to eight months out of the year. He might peak at 150 or 160 miles in a week, then “taper off” the week before a race.

He will run about 20 miles a week before the race, then in the following days 12, then eight, six and 12 to 20, followed by a day or two of rest.

Often, when training for a race that involves a lot of change in elevation, he will try to take some of his longer runs in the mountains.

An ultra runner and his crew at a checkpoint can resemble a bunch of buddies taking a leisurely break at a pickup softball game or a driver and his pit crew at the Indianapolis 500.

Ulrich resembles the latter. He has been known, in the closing hours of a race, to take fluids and food on the run, hardly slowing down, particularly if pursuit is close behind or if he has runners ahead who appear “catchable.”

Some races provide food and drink at various checkpoints, but it is seldom that a runner shows up for an “ultra” without a crew to supplement those supplies.

Ultra runners’ nutritional needs during a race are far from normal. At a recent race in Ohio, Ulrich consumed 25,000 calories in 64 hours — and lost five pounds while covering 256 miles.

His food log summary was 14 pages long.

He won that race with a 64-hour, nine-minute time, shattering the old mark of 74:41.

The nutrition can range from high-tech, state-of-the-art fitness drinks and energy bars to fruit to down right junk food.

“It’s kind of what the body wants,” Ulrich says of what he eats during a race.

“About 100 calories per mile is the rule of thumb on a flat course,” he says.

At the Race across Ohio, Ulrich was hitting Taco Bells in the late stages of the race, plus wolfing down some burgers and a homemade pizza with jalapenos.

Last summer, he was second in the Badwater 146, starting in the Death Valley location for which it is named, 282 feet below sea level and climbing to the top of Mount Whitney, 14,496 feet above sea level.

Thus, the race proceeds from the lowest point in the contiguous United States to the highest point in the Lower 48.

The first successful attempt to run the route is believed to have taken place in 1978, and only 14 of 87 who tried it over the next 12 years finished.

This year, 16 of 20 starters made it, led by Tom Possert, who relentlessly pursued Ulrich for 117 miles before taking over the lead.

The event was run in July, when Badwater was at its “baddest,” with temperatures during the day ranging from 115 to 150 in Death Valley.

Possert, an Indiana runner, finished in 38:30. Ulrich in 40:51, both cracking the old 43:22 record.

The race started at 6 pm with the temperature 113 degrees, and it was never below 100 through the night.

Ulrich could look back and see a string of flashlights through the darkness — and the stars above seeming almost close enough to touch.

The environment made special demands and would let those playing by its rules pass through, Ulrich says.

One of those rules was to soak up a lot of liquid. Ulrich went through 180 pounds of ice just to keep his head cool, used 19 gallons of water and had his weight drop from 156 pounds to 147. The latter weight was after drinking water at the finish to rehydrate.

He took a scale along to monitor his body weight along the way.

The extremes in weather are probably most pronounced at Badwater, but such extremes are typical of the conditions encountered in ultra running.

Preparation is vital, not only in training but in bringing along the
proper nutrition and equipment.
The temperatures can range from extremely hot to subzero, the terrain from sheer rock to asphalt highway to woodland trails to dirt roads to laps around a track.

On the trail runs, it is not difficult to get lost, although organizers are getting better about marking the trails. Advance scouting, sometimes even doing some running in the area before the race, can help alleviate that problem.

Extra shoes and clothing, along with the nutritional needs of the runner and crew, can easily fill up the back of a support vehicle.

"They’ve come up with fabrics that are unbelievable," Ulrich says of the specialized all-weather clothing.

The new fabrics dissipate moisture better than the old ones and are lightweight. A typical set of tights and a long-sleeved shirt and light jacket can easily withstand around 20 degrees and 25 mile-an-hour winds.

In addition, the fabrics repel water and do not have the old annoying rustle that earlier attempts at specialized foul-weather running gear did.

Ulrich gets some sponsorship help from Hind with clothing and Hi-Tec with shoes, sponsorships that began to come together last year when a fellow runner gave him a telephone number of a Hind representative.

"You just have to really approach a good number of them," he says of chasing sponsorship prospects.

He has a resume listing his accomplishments in running, among them the Run Across Ohio, Badwater 146, the completion of all six major 500-milers and placing in the top three of 14 events over the last three years.

Not long after Ulrich began running, he started eying marathons, the 26.2 mile distance that many people in the running boom of the late 1970s and early 1980s considered the ultimate challenge.

He ran the Pike’s Peak ascent, 13.4 miles, in 1982, then did the round trip, twice that distance, the next four years.

In 1983, he entered a 50-mile race, and while he completed about a dozen marathons over the next four years, going past the 50-mile mark lurked in the back of his mind.

In 1987, Ulrich took the big step — the Western States 100.

By 1988, he had a 24-hour win to his credit, a 122-1/2 mile-odyssey in Buffalo, New York, and was back at Western States and in his first run at Leadville, called "the Race Across the Sky" because it peaks out going over a mountain pass more than 12,000 feet above sea level.

Ulrich also took second place in the TAC (The Athletic Congress) 24-hour championship run in 1988, a placing he would repeat in 1990 by racking up more than 142 miles.

1989 was a true banner year for Ulrich.

That year, he became the first ultra runner ever to complete six 100-mile races in one year — and was in the top 10 in five.

He was second at Old Dominion, Virginia, in 19:44; 50th at Western States, Calif., in 21:39; second at Vermont in 17:06; seventh at the Leadville Trail 100 in 21:21; tied for ninth at Wasatch, Utah, in 21:21, and sixth at Angeles Crest, Calif., in 22:22.

That accomplishment took place in races from June to October.

He also placed third in a 48-hour race in Dallas, covering 202 miles.

That translated into more than 800 laps on a 400-meter track.

In 1990, there were Badwater and the Race Across Ohio, plus finishing Western States, Leadville, Pike’s Peak and several 50-50-milers.

Usually, in the 24- or 48-hour events run on a track, runners switch directions periodically to equalize the wear and tear on their bodies.

Ulrich slept about 1-1/2 hours during one 48-hour race — going for extended periods of time on little or no sleep is commonplace during "ultras."
Lack of sleep is far from the only hazard encountered in ultra running. There are risks of dehydration, hypothermia, digestive disorders, irregularities in blood pressure and various and sundry foot, leg, knee and back complaints.

In many events, medical personnel are stationed at intervals along the course or accompany the field in a vehicle to monitor weight, pulse, blood pressure and the like. The medical folks have been known to disqualify runners who do not meet the proper criteria.

Also, many races have cutoff points at various locations. If you do not reach a checkpoint by a certain time, you’re out.

Ulrich has finished most of his races and reports having had only one really scary experience. At Portland, Ore. after a 24-hour run, he was hobbling on a sore ankle and laid down on a bench to rest. Hypothermia brought his body temperature down to 92 degrees and sent him on an ambulance ride to an area hospital.

"A lot of people say, 'Don't you have trouble with your knees and stuff?' Well, yeah, you do, but once you get that base, the aches and pains start to disappear. Your body starts to adapt, that's what I've found," Ulrich reports.

He also finds his body going on a five or six-hour cycle, muscles feeling "crummy" for awhile, then good.

Marathoners often talk of a "wall" at 17 or 30 miles, and much has been made of buildup of such toxins as lactic acid in the muscular system, leading to soreness the day after a marathon.

Ulrich says that ultra runners do not have that stiffness and soreness - at least he usually escapes it. That may be because the athletes "run through" the toxins, flushing them out of the system, or there may be less buildup less of the slower pace, he theorizes.

"You get up into the multi-day stuff and it's real interesting," he says. For example, it is easy to nod off while crew members are elevating, icing and massaging his feet to keep them from swelling.

"You can sleep through absolutely anything," he asserts.

However, he says, you also wake up fast: "The whole concept of time is just gone."

Asked about his plans for this year, he digs out an already dog-eared appointment book.

He would like to take aim at a new record at Badwater, plus running Western States, Leadville and the TAC championships, and he is thinking about getting together a race across Colorado similar to the one across Ohio.

However, that would be more than 350 miles from north to south. The TAC 24-hour championship race is particularly alluring: "One of these days I'd like to win that. I'd like to be national champion. I've done it twice and been second twice."

The goals are not unrealistic for his age - an ultra runner peaks in his late 30s or early 40s. He is 39.

The motivation for the sport basically comes from within.

There are fancy belt buckles - a tough way, one of his pacers once told him, to acquire a belt buckle collection - for trail races, trophies for top finishes, some degree of fame among fellow runners and in specialty publications catering to runners and other such perks, but in the final analysis it is the challenge that makes Ulrich and those like him run.

The first of two running scrapbooks Ulrich has accumulated over the years start off with a saying he borrowed from an old bank advertising campaign: "To truly become number one you must constantly strive to surpass yourself. Not the competition."

There is also the camaraderie, knowing people nationwide who will insist on you staying overnight if you are anywhere nearby, who will do their best to beat you in an event, but who will support you to the hill when they are not competing with you.

Posselt, for example, who dueled so hard with Ulrich at Badwater, paced him for the last 10 miles of the Run Across Ohio.

"We're real supportive of each other," Ulrich says. "That's the way the sport is. That's one thing that's really nice about it."

Sitting down to a meal — or just sitting down — becomes impossible, and much looked forward to, during a race, as do other things like a good night's sleep or a shower.

"It gives you a better appreciation of some of the things that are luxuries in life."

The author-photographer has been with the Fort Morgan Times for 18 years. He has covered Ulrich's running career for the newspaper and has worked on Ulrich's crew.