

# SWIM-MASTER

VOL I - No 4 THE OFFICIAL PUBLICATION OF THE AAU MASTERS SWIMMING COMMITTEE AUGUST 1972

## FANCY FOOTWORK FOR THE MASTERS SWIMMER

BY H. F. ONUSSEIT

**Introduction:** "Using a two-beat kick is more than a freak action and represents an extension and refinement of our understanding of crawl technique," so says Forbes Carlile, famous Australian coach in the April 1972 issue of "Swimming World". Does this mean that we should all switch to the two-beat kick to have the most advanced freestyle technique?

On the other hand, is the freestyle kick so unimportant that we should pay little attention to it? After all, we read on page 30 of Counsilman's Science Of Swimming that "...the kick..does not act as a propulsive force in the crawl stroke...". In fact, on pages 27-28 he describes an experiment which shows that at sprinting speeds "...the swimmer... actually created an increased drag as a result of his kicking." I will try to show that (1) there is a "best kick" and that (2) the choice of kick is especially important to the older Masters Swimmer and (3) will depend on his or her physical attributes and the event being swum.

Carlile seems to agree for he says, "....we should allow for the physical characteristics and aptitudes of swimmers, and promote a wide variety of leg actions." However, on what basis should a kicking style be chosen? Before answering this question, let us define our terms.

**Definition Of Crawl Kick:** A pure six-beat kick (and I'm going to limit myself to "pure" rather than irregular kicks of the front and back crawls) occurs when there are six kicks (three by the left leg and three by the right leg) for each full arm-stroke cycle (counting the left and right arm motion as one cycle). This is an unfortunate terminology, in my opinion, and the kick might better be called a three-beat, since each leg moves through exactly three times as many complete cycles as does each arm. This revised terminology would permit agreement with the definition of the one and two-beat butterfly. However, we will stick to the older accepted terminology for the crawl kicks.

One should check his own type of kick with the aid of a friend. It has surprised me how few people know what their kick ratio is. Even some top swimmers and coaches have thought that the kick ratio is different at different swimming speeds or changes is one kicks hard or lightly. In general, this is not true, and the kick ratio becomes a reflex action and a well-defined part of one's swimming stroke.

In other words, if one has a pure six-beat freestyle kick, it will remain so while sprinting or swimming slowly or for that matter, when swimming the back-stroke. We also should be clear that a six-beat kick is not necessarily a harder or more vigorous kick than a lower ratio kick, such as, for example, a four-beat. One can churn up a froth while sprinting a four-beat stroke, whereas a six-beat may be a very light kick if one is swimming slowly. Only the ratio of arm cycles to leg cycles is involved in the kick definition and not the vigor of the kick.

**Assumptions:** In order to present my argument for the best choice of kick, I will make certain assumptions. These are:

1. The kick provides little or no propulsive function.
2. The kick ratio is firmly geared to the arms. I am assuming that no change in ratio takes place with a change in speed.
3. One of the prime functions of the kick is to keep the body horizontal in a streamlined position. A corollary of this is the assumption that the legs are not buoyant. A secondary assumption is that one uses a slower arm turn-over when swimming longer distances. This may seem obvious, especially for the Masters swimmers, but is important to my argument. World class swimmers, like John Kinsella, who go 53 seconds per 100 yards for the 500 and 56 per 100 for the 1650, are coming close to swimming at a constant speed for all competitive distances.

**Explanation of Best Choice For Kick:** Since we have assumed that the kick is non-propulsive, we can compare the role of the legs in swimming to that of the arms in running, where

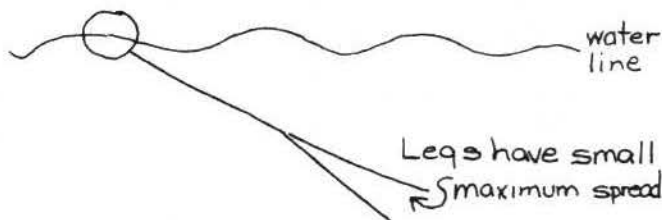
they are clearly non-propulsive. Without exception every runner uses what in swimming would be called a two-beat, (one arm cycle to one leg cycle). No one runs a four-beat or six-beat! Just for fun, I tried to run a four-beat (two arm cycles to each leg cycle), and it can be done. Therefore, by analogy of swimming to running, we can say that if the kick serves only for stabilization (legs are completely buoyant), we should use a two-beat kick just heavy enough to provide the best compromise between (1) stabilization, (2) increased drag as legs spread out in a heavier kick, and (3) energy expended in leg movement. A two-beat kick, then, is in order for the swimmer with buoyant legs. This is certainly true for the long distances and would also seem valid for the sprints. Shane Gourid, Carlile writes, uses a pure two-beat, even while sprinting. For a two-beat swimmer with extremely buoyant legs to switch to a six-beat kick while sprinting would seem not to be necessary or efficient. Of course, there are always swimmers who do well with an unorthodox style!

Having disposed of the swimmer fortunate enough to have extremely buoyant legs, how do we choose the best kick for the swimmer with non-buoyant legs? To help clarify my argument, I would like to present some "stick figures" of swimmers. These are intended to represent the side view of a swimmer under different conditions. The body positions have been exaggerated for illustrative purposes.

Figure 1

Body Position Of Swimmer With Non-Buoyant Legs Under The Following Conditions:

1. Slow Speed
2. Low Beat Kick (2 or 4-Beat)
3. "Light" Kick



Note: Body droops from horizontal position and legs have small maximum spread.

Note that in Figure 1 there is considerable droop of the body, which would cause unnecessary drag, thereby slowing the swimmer. In Figure 2 we show the same swimmer with all conditions the same, except that he is now using a "heavy" kick.

Figure 2

Body Position Of Swimmer With Non-Buoyant Legs Under The Following Conditions:

1. Slow Speed
2. Low Beat Kick (2 or 4-Beat)
3. "Heavy" Kick



Note: Less body droop but wider spread of legs than Figure 1.

Note that in Figure 2 that the "heavy" kick has brought the body more nearly horizontal but the drag is still high. The swimmer may have the illusion that he is perfectly level, since his feet break the surface of the water. However, because of the wide "heavy" kick there is still considerable droop of the body from horizontal. The next figure shows the improvement in streamlining possible with a higher beat kick.

Figure 3

Body Position Of Swimmer With Non-Buoyant Legs Under The Following Conditions:

1. Slow Speed
2. High Beat Kick (6 or 8-Beat)
3. "Light" Kick

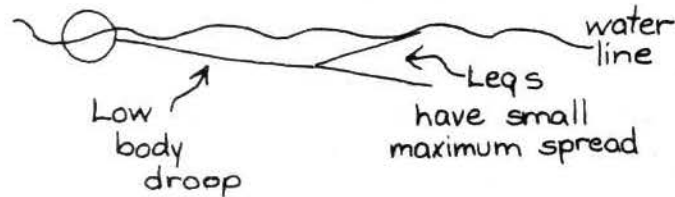


Figure 3, when compared to Figure 1 or 2, shows that the swimmer with a high beat kick can achieve a favorable body position even with a "light" kick. Presumably, the swimmer of Figure 3 can swim faster with less effort than the swimmers of figure 1 and 2. Note that the "heavy" low beat kick of Figure 2 is not equivalent to the "light" high beat kick of Figure 3. It should be emphasized that the speed of the kick is dependent on the arm turn-over. The only way the swimmer of Figure 1 or 2 can achieve the position of Figure 3 is to increase his arm turn-over; that is, to swim faster. If a swimmer has a low beat kick, it is useless to tell him he should have a light shallow kick at the water sur-

face while swimming slowly. To achieve the shallow kick he must sprint!

#### Advantages & Disadvantages Of Low Beat Kick:

As pointed out previously, the low beat kick has no disadvantages for distance races or sprints if one has buoyant legs. However, I can remember my first reaction to seeing the former World Record holder at 1500 meters, Steve Krause, swimming a pure two-beat. I figured the average swimmer could as easily imitate Steve's style as he could learn to walk upside down across the ceiling!

The general advantage of the low beat kick is that relatively less energy is devoted to the legs. More energy can be expended on the arms, which for most swimmers is the only source of propulsion.

The disadvantage of the low beat kick for most swimmers is that for long distance events the slower arm turn-over will cause a slower leg kick, allowing the body to droop to a poorly streamlined position. A "heavy" low beat kick will, of course, expend more energy on the legs but will not completely solve the problem of body droop as is shown in Figure 2. Of course, if the swimmer can click off hundred after hundred at a sub-minute pace, he will have less of a problem than would be experienced by an older Masters swimmer!

#### Advantages and Disadvantages Of A High Beat Kick:

The high beat (six beat or even higher) kick is often fine for distance swimmers with non-buoyant legs. A higher beat kick can be shallow and still keep the body in a level position at a relatively slow speed. An extreme example of this is my wife, who is not a particularly good swimmer. She swims backstroke extremely slowly but with a very flat body position. I guessed she was swimming a twelve-beat, but by actual count it was only a ten-beat! I am well aware that for many years swimmers have reduced the kick ratio for long distances. However, I am convinced that some swimmers will gain more by a high beat kick than they will lose in energy expended on the legs. This will, I feel, be especially true of the relatively slower swimmers we find in the older Masters age categories.

The high beat kick for the older Masters swimmers may cause even more difficult problems at the sprint distances:

1. The legs may limit the maximum rate of arm turn-over, thereby limiting sprinting speed. The arms will coast to allow the legs

to finish their cycle. The dependence of arm turn-over on the kick may be a subtle one of which the swimmer is not fully aware;

2. The legs at sprinting speeds will require an inordinate amount of the available blood circulation. Particularly in older swimmers or those with a relatively weak kick, the legs can give out from fatigue, thereby limiting the sprint speed. This happens to be my problem. My legs in the six-beat crawl will fatigue first when sprinting, whereas I do not experience this problem when sprinting butterfly (two-beat kick which is equivalent to the four-beat crawl). Any swimmer who "runs out of legs" in the 50 or 100 yards should suspect that he could sprint faster with a lower beat kick. Note that beyond a certain point it is impossible to kick lightly while sprinting. The legs, even in a "light" kick have to move violently to finish their three or four cycles for every arm stroke. It is quite easy to fall into the erroneous idea that the legs can be moved independently of what the arms are doing.

Choice Of The Best Kick: Since there are advantages and disadvantages for any type of kick, what are the options open to a swimmer? The options appear to be quite limited since the very best one...increasing the buoyancy of the legs...is closed. The others are:

1. Specialize at your best distance with the kick ratio you presently have. A corollary would be to swim every distance at approximately the same velocity, namely fast!

2. Learn to consciously change your kick ratio for the different distances. An analogy can be made to the variable transmission of an automobile in which a different gear ratio is used for different speeds. A low beat swimmer, who has poor body position when swimming the longer distances, can try using a higher beat. A high beat swimmer, on the other hand, who has trouble sprinting, could try shifting to a lower beat kick for the shorter races. Developing more than one style of crawl-stroke will not be easy and should undoubtedly be attempted only during the off season. The Masters swimmer has the advantage over his college counterpart in that he has lots of competitive years in which to experiment.

Conclusion: I trust that the preceding explanation has shown that an optimum beat kick can be chosen for the individual swimmer. There is a logic to the proper selection which goes beyond "two-beat for long distance and six-beat while sprinting". This axiom could very well, for some Masters swimmers, be exactly reversed.

# MASTERS NOTES SWIMMING

EDITORIAL: Please note the change of address for SWIM-MASTER (5340 N.E. 17th Avenue, Fort Lauderdale, FL 33308). The last two months have been hectic and I wish to thank my daughter for helping with the typing for this issue. More material has been submitted than space would allow. We now have 550 subscriptions!

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OPPORTUNITY LOST (OR THROWN AWAY) -Two young ladies who were among our best 11-12 swimmers recently came to the coach and stated, "I don't feel like swimming on the team any more. It's too much work...it's boring."

Well, girls, I guess you still have an important lesson to learn and it's this; it takes a lot of Hard Work to become proficient at anything you do, and, in the process, it does get tiresome and often tedious and boring. That's true of swimming, of studying, of fixing meals, ironing clothes, washing dishes, and driving down to the office to go to 'work' every day.

If you think swimming is too hard and boring you're in for a shock! It's a heckuva lotta fun compared to what comes later on!

"Quitters never win; winners never quit."

NEWSLETTER from CHUCK HINES, Asheville, NC

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"Did you ever swim upside down in a well lit pool and look up at the surface 5 to 10 feet above? It looks like a crystal palace. In a clear pool you feel like you are in a big large room with a crystal ceiling. I wish I could only stay under longer. Try it. You'll like it." STANLEY PUDELL

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BRUCE CARTER, Secretary of the Bentleigh Diggers Swimming Club of Melbourne, Australia writes, "I have read with great interest

an article by Forbes Carlile, on his recent tour of your Country, the part which interested me most was headed "THE OLDER AGE GROUPS". The above Club formed 18 months ago, is a sporting section of our local returned Servicemens Club, it has 30 active swimmers who swim all year around, mostly in the 50 year age group, no Champions, but enjoying the fun and exercise and competing each Thursday evening and Sunday mornings."

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THE OLDER "AGE GROUPS" - Forbes Carlile of Australia reported in the INTERNATIONAL SWIMMER that the USA has Age Group, Senior and now Master's swimming all covered by the official rules. This has tremendous implications for competitive swimming which is now presented as a life-time hobby and health promoting recreation. All over the USA older swimmers are "in training" on at least mile-a-day programs. The idea of participation of "retired" swimmers and officials in swimming is sweeping the USA. Now competitive swimming is for everybody. Moves are under way to bring in the Union of Old Swimmers in N.S.W. to contest AIR MAIL meets with Americans. Both Forbes and Ursula Carlile have started training and get up at 2:30 am to get their workouts in!

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MARK P. CAUGHLIN, a Purdue University graduate writes, "I am also extremely enthusiastic about the Master's swimming movement. I was honored and thrilled to swim in the 1st metropolitan meet held in the Washington DC area."

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ATTENTION MASTERS SWIMMERS - Air Fare to Hawaii for the Labor Day Masters Meet and Rough Water Swim is \$229.00 plus tax. This fare includes hotel (double occupancy), transportation to and from the airport, and other little "goodies", for Seven or Ten days. You can leave either Thursday or Saturday. Check Western or Pan American Airlines. Most of the Airlines offer this unbeatable package, so lets go show 'em how to swim. For entry blanks or further information, call Anne Adams (213) 866-1069. She has a list of swimmers going in case you're looking for a roommate.

## ADDITIONS TO SWIM MEET SCHEDULE

JULY 22	New Britain Parks & Recreation Department Masters Meet, New Britain, CT D. L. Donnelly, Dir of Pools, City Hall, 27 W Main St., New Britain, CT
JULY 29	Will Rogers State Beach Annual Open 1-Mile Ocean Swim, Los Angeles, CA Lt. Tom Hargett, Lifeguard Hdq, 2300 Ocean Front Walk, Venice, CA 90291
JULY 30	Pacific Northwest Association Masters Swim Meet, Federal Way, WA Frank Smith, 2826 S.W. 17th, Seattle, WA 98166
AUG. 19	Meet for Masters Swimmers, Garden State Swim Pool, Berkley Heights, NJ Joseph B. Twaits, Jr., 649 Springfield Ave., Berkley Heights, NJ 07922



—Staff Photo by George Goethe

## Dr. Jones And Family Enjoy Unique Pool

Relaxing in their 75x10-foot swimming pool, highly successful Masters swimmer Dr. Burwell Jones and his family shows how to be all wet and like it too. Left to right, in rows of two, are Maureen and Elene, Kathleen and James, Dr. and Mrs. Jones, and B. J.

## Keeping Up With Joneses Could Be Very Difficult

By MARK CARDON

Herald-Tribune Sports Writer

Behind Dr. Burwell Jones' home on Hillview Drive there is probably the most unique swimming pool in Sarasota.

It is 75 feet long and 10 feet wide. Two sets of stringed buoys indent both sides of the pool by one foot to make one eight-foot regulation racing lane. A huge time clock is propped up on the west end of the pool.

This is where Dr. Jones, former Olympian, NCAA champion, now 39-years-old and a successful dermatologist, works out daily.

Why?

The reason is Masters swimming, an official American Athletic Union program to develop training and offer swimming competition for men and women 25 years of age and older.

Dr. Jones wasn't exactly out of shape when he joined Masters swimming six months ago, but he hadn't swam competitively since 1965. He enjoyed life. He had his

two martinis after work at night, and about the only activity he got was playing golf twice a week and pleasure swimming with his five children.

Before Dr. Jones became active in Masters swimming, he weighed 195 pounds and was a four-handicap golfer. Now, he weighs 183 and is an eight handicapper. Not too long ago, on a Saturday, he won the Professional Services golf tournament at Longboat Key Golf Club in the morning with a gross score of 76. Then, came back in the afternoon at the Lido Beach Pool and swam 200, 75-yard laps in a Swim-A-Thon to raise money for a badly needed 50-meter, Olympic size pool for Sarasota.

Recently, Dr. Jones competed in the Masters National Short Course Swimming Championships in San Mateo, Calif., and won five events. He also brought home the highest point award for his age group (35-39).

"This program could develop into some-



Peter Peach after being disqualified in the 500 yd. freestyle.

thing big, where large numbers of people participate and attend," he said the other day after completing one of his timed-sessions in the pool.

"People are constantly coming into my office and telling me they used to swim and would like to get back into it. I tell them to come out.

"People need a purpose to stimulate exercise every day," he continued. "Holding a meet and giving out a medal to the hero of the day is the end result."

Dr. Jones' active life has rubbed off on his children. His 14-year-old son, B. J., is the No. 1 golfer on Cardinal Mooney's team, and the four others, Jim, 13; Elene, 11; Kathleen, 9; and Maureen, 8; are avid swimmers on the YMCA team.

"We don't push our kids into anything," he said. "My wife and I encourage them to do things . . . anything . . . golf, swimming, basketball, music . . . and to try to be the best at what they do. They must practice at it. I'm a firm believer in practice."

Dr. Jones admits Masters swimming has cut down on his social life. However, it allows him to become more involved with his family.

"We've never taken a two-week vacation. We have always planned our time around our children's activities . . . golf tournaments, swimming, piano concerts."

Dr. Jones himself will be competing in meets this summer in Fort Myers, Los Angeles and Bloomington, Ind., where the Masters long course championships will be held.

Meanwhile, B. J. will be playing numerous golf tournaments and Jim, Elene, Kathleen and Maureen, will attend summer swim clinics in the midwest.

It is refreshing to see a family so involved. Maybe it wouldn't be a bad idea to try to keep up with the Joneses.

# Masters Swimming: Toward the Prolongation of Vigorous Life

DR. PAUL HUTINGER

Assistant Professor, Western Illinois University, Macomb

Masters Swimming, a recently developed program sponsored by the American Swimming Coaches Association and sanctioned by the AAU, may provide possible means of postponing the aging process, prolonging vigorous life. For the average person, physiological factors display rapid deterioration after the age of 25 (Comfort, 1969), but a postponement or slowing of the aging process has been demonstrated through a program of regular training. Participation in Masters Swimming provides competition, a great motivational device which can induce men and women to continue a training program.

A complete physical examination is a must before initiating a regular training program. The swimmer must realize that progressive deterioration of all bodily systems must be assessed by a medical doctor. A gradual approach to the training program without undue stress should be a sensible guide. A long range goal in mind rather than a fast improvement in time or time trials should be the approach for the Master Swimmer. A marathon training program, three days a week, such as the Red Cross 50 mile program, is a practical approach, gradually working into a mixed program of fartlek and interval training.

Heart rate can be used as an indication of work load intensity during work and as an evaluation of the fitness level by the recovery period of heart rate. Thus a heart rate of 140/150 would indicate a medium stress load for a 40 year old, a suggested 85% of his maximum heart rate. (The Association, 1970). A recovery to 110 HR after 2 minutes rest, after a work load of 150 HR, indicates a good cardio-vascular fitness level.

What are the effects of a year round swimming training program on a 46 year old subject? If the work load is increased, will the subject show a corresponding increase in his performance level as a training effect? What effect does the training program have on various physiological factors? Research studies on older athletes (Saltin 1968) indicated a high level of physiological functions and a prolongation of vigorous life. A senile old age can be postponed to a much later time in life by keeping various physiological functions at a high level. Clarence DeMar (Curren 1961), a marathon runner competing at age 65, was studied extensively. His performance on the laboratory treadmill indicated an excellent physical condition in terms of his oxygen utilization and lactic acid concentration. After his death at age 70, due to cancer, the autopsy showed little atherosclerosis, and indicated a slowing down of the aging process of the vascular system.

Before examining the data on a present Master Swimmer, let us consider the research associated with aging. The misconception that the loss of cells continuously occur in all the tissues, until a vital organ causes a breakdown in homeostasis is not valid. According to Comfort (1970), the biological clock of man seems to be governed by a progressive accumulation of mutated body cells and synthesized biochemicals which results in deterioration of body functions. The DNA in a cell produces a number of enzymes which mediate the biochemical processes within the cell. Errors arise in this process, and with aging the errors increase but the body does not have the capacity to correct the errors. Experimental studies with mice have shown a possible biological interference with the life span using simple dietary modifications. Mice fed for two days and starved on the third have affected a 50% greater life span. Such a finding has some application for future long range studies with humans.

The aspect of the effect of regular training on the physiological factors in humans can be demonstrated at present by examining the data on a Masters Swimmer. The subject, 46 years old, 5 foot seven inches, 150 lbs., trained for two months of the year (five days a week) for the years 1965-66-67-68, beginning a year-round program in 1969. Training for the year from June 1969 to June 1970 consisted of 1500 to 2000 yards a day, five days a week. Such yardage is equal to 4 to 5 miles of running a day. The program started with marathon training for about six weeks and proceeded with mostly interval training of 150/170 heart rate stress load. The subject was capable of 185 to 200 maximum heart rate (Astrand, 1959). The typical work-out consisted of a 400 yard warm up swim; 10 x 50 crawl on the minute (:31.5 average); 200 yards kick; 5 x 100 crawl on 2 minutes (best average 1:06.5); 200 yards easy swim. Different strokes were used in the various workouts. The 200 yard freestyle best time was 2:16.1, and 200 yard backstroke 2:32.0.

Maximum oxygen uptake was measured in the laboratory using the standard Balke (1959) treadmill test at 3½ mph and a 1% grade increase each minute to exhaustion.

Results:	February 12, 1970	51.5 ml/kg/min.
	February 19, 1970	51.4 ml/kg/min.
	March 17, 1970	50.39 ml/kg_min.
	April 7, 1970	52.16 ml/kg/min.

Subjects weight—68.1 kilograms.

Maximum ventilation 177 liters/min.

According to Taylor (1955) maximum oxygen uptake is an objective measure of cardiorespiratory performance. The O<sub>2</sub> uptake for the subject compared favorably with a random group of 18 year olds. (Astrand 1970). Training during the year from June 1970 to June 1971 consisted of an average of 2000 to 2500 yards daily, an increase of 20 to 25% in the total amount of yards in the training program. Such yardage is equal to about 5 to 6 miles of daily running.

1970-71 typical workout was similar to the previous year but with more yardage and faster straight sets. A warm-up of 400 yards swim; 200 yard kick; 10 x 50 on the minute (30.8 best average); 5 x 100 on two minutes (1:05.0 best average); 400 yard swim easy; 5 x 100 pull (1:08 best average). The 200 yard freestyle best time was 2:11.6 while the 200 yard backstroke was 2:27.9, almost a 5% better performance from the previous year. The maximum oxygen uptake measurement on March 22, 1971 was 56.7 ml/kg/min., almost a 10% increase in performance over the previous year. Swimming performance did not have a linear relationship with the max O<sub>2</sub> uptake probably because the swimming times were part of five events over a two-day schedule. The subject is National Masters Champion and record holder in four events for the 45 years-and-over age group.

Benefits from a vigorous physical activity program include; prevention of arteriosclerosis (Wolff 1957), a lower resting heart rate, lower blood pressure, greater vital capacity, greater max O<sub>2</sub> uptake, and a lower serum cholesterol level. The program described above indicated a slowing down of physiological aging factors with a regular cardiorespiratory exercise program. Recent physiological measurements on the subject, 46 years old, 5 foot seven inches 150 lbs., demonstrated a blood pressure of 126/85; a resting heart rate 53, (DeVries, 1968); a vital capacity of 4.70 liters, 3.86 is

**NOTE:** The benefits from a regular training program can be realized by the average Masters swimmer as presented in this article.

average (Collins, 1967); oxygen uptake of 56.7 ml/kg/min., 35 is average; maximum breathing capacity 177 liters/min., 111 is average; a maximum heart rate of 200, 170 is average (Astrand 1959). These physiological measurements are values similar to the average 30 year old, according to comparable data by Astrand (1970). The data suggest that the present subject demonstrates a slowing down of the aging process with a corresponding prolongation of vigorous life.

The Masters Swimming program offers an opportunity to continue conditioning or re-institute conditioning in those over 25 years of age. It can also stimulate research in the physiology and psychology of masters participation as well as investigation of the benefits of continued exercise programs on aging processes, cardiopulmonary involvement, and preventable debilitating processes. The program provides goals towards which older participants can be motivated to work through competitive swimming meets. The age groups include 25-34, 35-44, 45-54, 55 and over. For additional information contact John Spanuth, AAU Aquatics Administrator, 3400 West 86th Street, Indianapolis, Indiana.

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# SWIM MEET SCHEDULE

JULY 15	Oak Ridge Masters Invitational Swim Meet, Oak Ridge, TN Miss Becky Lee, P.O. Box 1, Oak Ridge, TN 37830
JULY 15-16	City of Los Angeles Masters, Van Nuys, Sherman Oaks SPAAAU Swim Committee, P.O. Box 977, No. Hollywood, CA 91603
JULY 22	Masters "Funsville" Relay Meet, Huntington Beach, CA SPAAAU Swim Committee, P.O. Box 977, No. Hollywood, CA 91603
JULY 22	Dana Point Rough Water Swim, one mile within the harbor SPAAAU Swim Committee, P.O. Box 977, No. Hollywood, CA 91603
JULY 23	Wilmette Park District Masters Championships, Wilmette, IL Bob Steele, 2705 Wildwood Lane, Deerfield, IL 60015
JULY 23	Huntington Masters Mile, Huntington, IN Glen S. Hummer, R.R. #8, Huntington, IN 46754
JULY 28-30	Griffiss Air Force Base S & D Meet, Rome, NY Major Howard Pedersen, 2604 Thor Ave., Griffiss AFB, NY 13440
JULY 28-30	East Lake Masters Swim Meet, Atlanta, GA Georgia Masters Swim Assn., P.O. Box 33042, Decatur, GA 30033
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AUGUST 11-13	NATIONAL AAU MASTERS LONG COURSE SWIMMING CHAMPIONSHIPS Bloomington, Indiana - Contact John Spanuth, A.A.U. House, 3400 West 86th Street, Indianapolis, IN 46268
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AUG. 18-20	Crestmoor Masters Swim Meet, Denver, CO 80222 Jody Anderson, 250 S. Cherry St., Denver, CO 80222
AUG. 27	Santa Monica Arts Festival - Masters Pentathlon - CA SPAAAU Swim Committee, P.O. Box 977, No. Hollywood, CA 91603
SEPT 3	Hawaiian Masters Long Course Open Swim Meet - Honolulu, HI Masters Swim, P.O. Box 1314, Honolulu, HI 96807
SEPT 4	Waikiki Roughwater Swim - Honolulu, HI Waikiki Swim, P.O. Box 1314, Honolulu, HI 96807
SEPT 16-17	Livermore Masters - Livermore, CA SPAAAU Swim Committee, P.O. Box 977, No. Hollywood, CA 91603
SEPT 23	Mission Viejo Masters Fun Meet, Mission Viejo, CA SPAAAU Swim Committee, P.O. Box 977, No. Hollywood, CA 91603





Table of swimming results for various events including 100 YD FREESTYLE, 200 YD FREESTYLE, 50 YD BUTTERFLY, etc. with names and times.

Table of swimming results for DCAAU MASTERS SWIM MEET, 100 YD FREESTYLE, 200 YD FREESTYLE, etc. with names and times.

Table of swimming results for 100 YD FREESTYLE, 200 YD FREESTYLE, 50 YD BUTTERFLY, etc. with names and times.

Table of swimming results for 50-54, 55-59, 60 & Over, 50 YD FREESTYLE, etc. with names and times.

Table of swimming results for 30 MT BUTTERFLY, 50 MT FREESTYLE, 100 MT FREESTYLE, etc. with names and times.



35-39
100 MT FREESTYLE
Buddy Belshe, 38 1:05.5
Sandy Gideonse, 38 1:03.7
Alex Gilbert, 38 1:16.9
400 MT FREESTYLE
Buddy Belshe, 38 5:13.0
Gilbert, 38 6:23.1
MT BACKSTROKE
Buddy Belshe, 38 3:01.8
Sandy Gideonse, 38 1:03.7
Alex Gilbert, 38 1:16.9
100 MT BACKSTROKE
Alex Gilbert, 38 1:29.9
Richard Elliott, 36 1:30.1
Brian Stuart, 37 1:33.3
100 MT BUTTERFLY
Alex Gilbert, 38 1:21.5
Richard Elliott, 36 1:26.1
Brian Stuart, 37 1:35.0
40-44
100 MT FREESTYLE
Marvin Burns, 43 1:09.6
Russ La Telle, 41 1:11.0
Eugene Guds, 43 1:18.2
Norm Frieze, 44 1:18.8
Bus Schumacher, 42 1:23.5
Tom Wirt, 40 1:24.9
400 MT FREESTYLE
Sean McConnell, 40 6:04.3
Norm Frieze, 44 6:18.6
Bud Schumacher, 42 6:37.0
Howard Bennett, 42 6:37.1
Tom Wirt, 40 7:18.7
200 MT BACKSTROKE
Sean McConnell, 40 3:02.0
Norm Frieze, 44 3:04.0
100 MT BACKSTROKE
Russ La Telle, 41 1:29.4
Marvin Burns, 43 1:30.0
Tom Wirt, 40 1:33.4
Bud Schumacher, 42 1:35.9
Pavel Novotny, 42 1:40.5
Eugene Guds, 43 1:41.2
100 MT BUTTERFLY
Pavel Novotny, 42 1:25.5
Stan McConnell, 40 1:29.9
Bud Schumacher, 42 1:33.2
Eugene Guds, 43 1:35.7
Norm Frieze, 44 1:45.8
Tom Wirt, 40 Disq.
45-49
100 MT FREESTYLE
Marcus, 47 1:10.4
Buvick, 47 1:18.3
Cen Coon, 46 1:29.7
400 MT FREESTYLE
Jim Marcus, 47 6:01.9
200 MT BACKSTROKE
Jim Marcus, 47 3:22.2
100 MT BACKSTROKE
Jim Marcus, 47 1:35.5
Norm Buvick, 47 1:41.2
100 MT BUTTERFLY
Jim Marcus, 47 1:32.2
50-54
100 MT FREESTYLE
Lyle Felderman, 52 1:18.3
400 MT FREESTYLE
Angy James, 53 7:10.2
200 MT BACKSTROKE
Paul Herron, 51 2:53.4
Angy James, 53 3:54.2
100 MT BACKSTROKE
Tom Lind, 54 1:29.0
Angy James, 53 1:57.5
100 MT BUTTERFLY
Tom Lind, 54 1:34.6
55 & Over
100 MT FREESTYLE
Jim Eubank, 56 1:11.4
John McKenzie, 55 1:17.8
Walt Pfeiffer, 58 1:23.2
Mel Maxwell, 60 1:30.7
Al Guth, 63 1:34.5
400 MT FREESTYLE
Jim Eubank, 56 5:52.5
Walt Pfeiffer, 58 6:33.4
John McKenzie, 55 6:58.0
Al Guth, 63 7:14.3
Leonard Chapin, 64 7:58.3
200 MT BACKSTROKE
John McKenzie, 55 3:37.6
Walt Pfeiffer, 58 3:42.5
Al Guth, 63 3:58.5
Mel Maxwell, 60 4:25.8
100 MT BACKSTROKE
Rufus Clark, 61 1:47.0
Al Guth, 63 1:53.7
Hex Maxwell, 60 2:02.8
100 MT BUTTERFLY
Al Guth, 63 2:05.5
25-34 RELAY
200 MT MEDLEY RELAY
SPVAC (Krueger, Jeffers, Langendoen, Boss) 1:58.7
Mission Viejo 2:12.3
140+ RELAY
200 MT MEDLEY RELAY
SPVAC (Krueger, McKenzie, Wirt, Langendoen) 2:12.7
HBSC (McConnell, Belshe, Burns, Stuart) 2:21.5

P661B (Rae, Felderman, Scaife, Lind) 2:35.8
SENIOR WORLD GAMES - SWIMMING
June 24-25, 72 Los Angeles, CA
WOMEN
25-29
100 MT FREESTYLE
1. Terri Mejia 1:07.9
2. Cecilia Brown 1:13.1
3. Carol Skolnick 1:20.5
4. Sally Jo Antonchuk 1:21.4
200 MT FREESTYLE
1. Terri Mejia 2:29.8
2. Cecilia Brown 2:44.0
3. Cathy Campbell 3:01.0
400 MT FREESTYLE
1. Terri Mejia 5:25.0
2. Cecilia Brown 5:51.2
1500 MT FREESTYLE
1. Cecilia Brown 23:13.6
2. Ingrid Daland 24:54.2
3. Schelly Armstrong 32:36.9
100 MT BUTTERFLY
1. Cecilia Brown 1:19.2
100 MT BACKSTROKE
1. Ingrid Daland 1:27.1
100 MT BACKSTROKE
1. Ingrid Daland 1:26.4
2. Carol Skolnick 1:31.6
3. Kathy Campbell 1:42.9
4. Sally Jo Antonchuk 1:46.1
5. Schelly Armstrong 2:23.6
150 INDIVIDUAL MEDLEY
1. Terri Mejia 2:08.4
2. Ingrid Daland 2:12.5
3. Carol Skolnick 2:26.7
4. Sally Jo Antonchuk 2:27.5
5. Schelly Armstrong 3:20.4
30-34
100 MT FREESTYLE
1. Martha Chapin 1:21.0
2. Lynne DeVictoria 1:40.0
3. Beverly Coon 1:40.2
200 MT FREESTYLE
1. Martha Chapin 3:25.9
100 MT BUTTERFLY
1. Lynne DeVictoria 2:36.6
100 MT BACKSTROKE
1. Martha Chapin 1:32.4
2. Lynne DeVictoria 1:54.3
3. Esther Coroneil 2:03.8
100 MT BACKSTROKE
1. Helen Geoffrin 1:51.1
2. Lynne DeVictoria 1:59.2
150 INDIVIDUAL MEDLEY
1. Martha Chapin 2:44.3
2. Helen Geoffrin 2:57.6
3. Lynne DeVictoria 3:08.0
4. Beverly Coon 3:15.5
35-39
100 MT FREESTYLE
1. Evelyn Debes 1:22.5
2. Mary Spencer 1:28.8
3. Judy Hathaway 1:30.5
200 MT FREESTYLE
1. Evelyn Debes 3:08.5
400 MT FREESTYLE
1. Evelyn Debes 6:45.1
1500 MT FREESTYLE
1. Judy Gilbert 32:58.0
100 MT BACKSTROKE
1. Connie Wilson 1:32.5
2. Evelyn Debes 1:39.7
100 MT BACKSTROKE
1. Gisela Groves 1:52.8
150 MT INDIVIDUAL MEDLEY
1. Evelyn Debes 2:37.5
2. Mary Spencer 2:49.4
40-44
100 MT FREESTYLE
1. Edith Gruender 1:24.0
200 MT FREESTYLE
1. Ann Adams 3:01.0
2. Edith Gruender 3:11.2
3. Ann Baden 3:52.5
400 MT FREESTYLE
1. Ann Adams 6:24.1
2. Edith Gruender 6:51.2
1500 MT FREESTYLE
1. Ann Adams 27:00.8
2. Edith Gruender 27:50.7
100 MT BUTTERFLY
1. Edith Gruender 1:51.9
100 MT BACKSTROKE
1. Rita Mills 1:47.5
2. Ann Baden 1:52.0
3. Edith Gruender 1:56.3
150 MT INDIVIDUAL MEDLEY
1. Ann Adams 2:21.7
2. Edith Gruender 2:40.2
3. Ann Baden 2:57.7
4. Rita Mills 2:58.0
45-49
100 MT FREESTYLE
1. Gloria Stupfel 2:22.2
400 MT FREESTYLE
1. Betty Talbot 7:34.8
1500 MT FREESTYLE
1. Betty Talbot 30:08.9

100 MT BACKSTROKE
1. Muriel Virgo 2:00.2
100 MT BREASTSTROKE
1. Sandy Lewis 2:00.1
2. Muriel Virgo 2:13.5
50-54
100 MT FREESTYLE
1. Rita Simonton 1:34.8
2. Bette Crowell 1:36.3
3. Zada Taft 1:42.9
4. Johanna Hageman 1:43.4
5. Viola Thompson 1:43.4
6. Joan Smith 1:57.8
200 MT FREESTYLE
1. Rita Simonton 3:37.4
2. Johanna Hageman 3:44.0
3. Viola Thompson 3:52.5
4. Zada Taft 4:00.0
400 MT FREESTYLE
1. Rita Simonton 7:45.6
2. Johanna Hageman 8:05.5
3. Viola Thompson 8:22.8
1500 MT FREESTYLE
1. Johanna Hageman 30:45.8
2. Rita Simonton 31:08.6
3. Viola Thompson 34:27.5
50 MT BUTTERFLY
1. Zada Taft 55.4
2. Viola Thompson 59.5
3. Annetta Pfeiffer 1:14.3
100 MT BACKSTROKE
1. Bette Crowell 1:46.5
2. Zada Taft 1:50.0
3. Johanna Hageman 1:57.4
4. Annetta Pfeiffer 2:03.5
100 MT BACKSTROKE
1. Bette Crowell 2:05.0
2. Viola Thompson 2:07.0
3. Zada Taft 2:11.4
150 MT INDIVIDUAL MEDLEY
1. Bette Crowell 2:51.5
2. Zada Taft 3:04.2
3. Rita Simonton 3:06.7
4. Viola Thompson 3:23.3
5. Annetta Pfeiffer 3:44.6
55-59
100 MT FREESTYLE
1. Mildred Anderson 2:07.1
2. Dorothy Sweet 2:09.7
200 MT FREESTYLE
1. Sophia Rehman 4:14.6
2. Dorothy Sweet 4:21.5
3. Mildred Anderson 4:26.8
400 MT FREESTYLE
1. Sophia Rehman 9:15.5
2. Mildred Anderson 9:31.7
1500 MT FREESTYLE
1. Sophia Rehman 37:15.0
50 MT BUTTERFLY
1. Mildred Anderson 1:01.3
100 MT BACKSTROKE
1. Mildred Anderson 2:20.7
100 MT BACKSTROKE
1. Mildred Anderson 2:04.0
150 MT INDIVIDUAL MEDLEY
1. Mildred Anderson 3:21.6
60-64
100 MT FREESTYLE
1. Johnnie Belache 2:15.0
200 MT FREESTYLE
1. Dorothea Cole 5:05.9
2. Johnnie Belache 5:08.4
100 MT BACKSTROKE
1. Johnnie Belache 2:15.5
2. Dorothea Cole 2:25.2
150 MT INDIVIDUAL MEDLEY
1. Johnnie Belache 4:21.4
70-over
100 MT FREESTYLE
1. Pearl Miller 3:28.3
100 MT BACKSTROKE
1. Pearl Miller 3:46.3
MEN
25-29
100 MT FREESTYLE
1. Gary Langendon 58.8
200 MT FREESTYLE
1. Gary Langendon 2:15.2
400 MT FREESTYLE
1. George Warren 5:11.3
1500 MT FREESTYLE
1. George Warren 20:50.4
100 MT BUTTERFLY
1. Gary Langendon 1:02.2
2. Mike Carretto 1:11.5
100 MT BACKSTROKE
1. Ken Krueger 1:08.3
2. Bob Smith 1:10.8
100 MT BACKSTROKE
1. Paul Jeffers 1:15.5
2. George Warren 1:24.1
3. Bob Smith 1:24.6
4. Ken Bechtel 1:28.4
150 MT INDIVIDUAL MEDLEY
1. George Warren 2:39.4
2. Robert Smith 2:44.3
3. Ken Bechtel 3:14.6
30-34
100 MT FREESTYLE
1. Burt Kanner 1:01.9
2. Pat Schulp 1:05.2
200 MT FREESTYLE
1. Burt Kanner 2:18.4
2. John Bushman 2:29.9

400 MT FREESTYLE
1. Burt Kanner 5:02.8
2. Pat Schulp 5:04.0
3. Ken Hardwick 7:26.4
1500 MT FREESTYLE
1. Pat Schulp 20:07.3
100 MT BUTTERFLY
1. F. R. Stewart 1:07.5
2. Burt Kanner 1:13.3
100 MT BACKSTROKE
1. John Bushman 1:20.7
100 MT BACKSTROKE
1. Pat Schulp 1:22.5
150 MT INDIVIDUAL MEDLEY
1. Pat Schulp 2:48.2
35-39
100 MT FREESTYLE
1. Bumpy Jones 59.9
2. Sandy Gideonse 1:04.1
3. Dennis Rice 1:08.2
4. Art Welch 1:10.8
200 MT FREESTYLE
1. Bumpy Jones 2:14.4
2. Dennis Rice 2:35.9
3. Art Welch 2:40.9
4. Sandy Gideonse 2:43.0
5. Ray Jenkins 2:57.9
6. Richard Pihl 3:01.7
7. John Hancock 3:35.0
8. Gary Yarger 5:25.0
400 MT FREESTYLE
1. Bumpy Jones 4:55.2
2. Buddy Belsche 5:22.9
3. Dennis Rice 5:43.5
4. Art Welch 5:47.3
5. Kiehl Martin 6:26.2
6. Ray Jenkins 6:26.8
1500 MT FREESTYLE
1. Bumpy Jones 19:59.5
2. Buddy Belsche 21:21.0
3. Art Welch 23:15.6
4. Dennis Rice 23:17.5
5. Ray Jenkins 25:48.6
6. Keith Martin 26:49.0
100 MT BUTTERFLY
1. Alex Gilbert 1:21.5
2. Art Welch 1:25.4
3. Keith Martin 1:37.7
100 MT BACKSTROKE
1. Sandy Gideonse 1:19.0
2. Buddy Belsche 1:24.8
3. Art Welch 1:28.3
4. Richard Pihl 1:33.0
100 MT BACKSTROKE
1. Pat Wilson 1:30.2
2. Alex Gilbert 1:32.8
3. Kiehl Martin 1:36.8
4. Art Welch 1:49.7
150 MT INDIVIDUAL MEDLEY
1. Art Welch 3:05.0
2. Alex Gilbert 3:14.0
3. Kiehl Martin 3:22.4
4. John Hancock 4:04.3
40-44
100 MT FREESTYLE
1. Don Rosenthal 1:03.2
2. Carl Yates 1:05.5
3. Russell Latelle 1:08.4
4. Robert Jimenez 1:11.5
5. Dan Gruender 1:19.8
200 MT FREESTYLE
1. Carl Yates 2:24.9
2. Don Rosenthal 2:27.5
3. Pedro Garcia 2:29.3
4. Robert Cunningham 2:37.3
5. Robert Jimenez 2:48.6
6. Pierre Hathaway 2:52.7
7. Eugene Guds 2:59.8
8. Don Stupfel 3:00.0
400 MT FREESTYLE
1. Carl Yates 5:08.7
2. Pedro Garcia 5:18.0
3. Robert Cunningham 5:34.9
4. Robert Jimenez 6:21.2
5. Ray Schumacher 6:43.9
6. Eugene Guds 6:45.3
1500 MT FREESTYLE
1. Carl Yates 20:52.9
2. Robert Cunningham 24:28.8
3. Pierre Hathaway 25:47.8
4. Ray Schumacher 26:43.9
5. Dan Gruender 27:21.2
6. Don Johnson 31:26.5
7. John Deis Cruz 34:12.8
100 MT BUTTERFLY
1. Pavel Novotny 1:23.9
2. Carl Yates 1:24.9
3. Robert Cunningham 1:33.3
4. Ray Schumacher 1:38.7
5. Eugene Guds 1:39.0
100 MT BACKSTROKE
1. Ken Kimball 1:23.5
2. Don Stupfel 1:23.9
3. Pierre Hathaway 1:25.7
4. Brent Jonsson 1:27.0
5. Francisco Donia 1:32.1
100 MT BACKSTROKE
1. Russell Latelle 1:26.2
2. Robert Cunningham 1:31.4
3. Bob Cannon 1:33.8
4. Pavel Novotny 1:35.1
5. Ray Schumacher 1:36.6
6. John Bakilla 1:41.7
150 MT INDIVIDUAL MEDLEY

1. Carl Yates 3:02.8
2. Robert Cunningham 3:11.1
3. Ken Kimball 3:17.6
4. Pierre Hathaway 3:19.6
5. Don Stupfel 3:21.1
6. Ray Schumacher 3:29.2
7. Bob Cannon 3:30.8
45-49
100 MT FREESTYLE
1. Duane Draves 1:07.1
2. Don Lengel 1:12.9
3. Frank Blair 1:14.7
4. Ken Coon 1:24.1
5. Luis Valle 2:25.9
200 MT FREESTYLE
1. Duane Draves 2:29.2
2. Frank Blair 2:42.9
400 MT FREESTYLE
1. Duane Draves 5:30.7
2. Frank Blair 5:45.5
3. Lew Roberts 8:05.6
1500 MT FREESTYLE
1. Duane Draves 22:37.8
2. Frank Blair 22:59.5
3. Ken Kelly 31:57.4
4. Luis Valle 44:03.4
100 MT BUTTERFLY
1. Don Lengel 1:37.0
100 MT BACKSTROKE
1. Duane Draves 1:16.3
2. Luis Valle 2:28.7
100 MT BACKSTROKE
1. Ranson Arthur 1:27.7
2. Don Lengel 1:41.5
3. George Kim 1:45.3
150 MT INDIVIDUAL MEDLEY
1. Donald Lengel 3:46.2
2. George Kim 4:37.5
50-54
100 MT FREESTYLE
1. Jim Welch 1:06.2
2. Warren Kleist 1:07.4
3. Martin Foster 1:08.0
4. Dore Schwab 1:10.5
5. Dick Smith 1:12.7
200 MT FREESTYLE
1. Jim Welch 2:33.1
2. Martin Foster 2:39.4
3. Paul Herron 2:39.5
4. Warren Kleist 2:40.6
5. Ray Taft 2:45.9
6. Reno Rapagnani 2:48.5
7. Dick Smith 2:50.0
8. Dore Schwab 2:56.8
400 MT FREESTYLE
1. Jim Welch 5:40.4
2. Warren Kleist 5:56.1
3. Dick Smith 6:25.4
4. Joe Sacher 6:36.6
5. Cliff Wright 6:51.6
1500 MT FREESTYLE
1. Jim Welch 22:50.8
2. Joe Sacher 25:31.2
3. Dick Smith 27:14.1
4. Cliff Wright 27:46.4
50 MT BUTTERFLY
1. Ray Taft 35.8
2. Warren Kleist 37.6
3. Tom Lind 38.0
4. Paul Herron 40.4
5. Dick Smith 41.7
6. Dore Schwab 42.3
100 MT BACKSTROKE
1. Paul Herron 1:16.6
2. Ray Taft 1:22.0
100 MT BACKSTROKE
1. Tom Lind 1:28.2
150 MT INDIVIDUAL MEDLEY
1. Paul Herron 2:55.1
2. Warren Kleist 3:08.2
3. Ray Taft 3:14.5
35-59
100 MT FREESTYLE
1. Jim Eubank 1:10.2
2. John McKenzie 1:16.0
3. Hamilton Anderson 1:18.1
4. J. English Smith 1:20.5
200 MT FREESTYLE
1. Jim Eubank 2:38.4
2. John McKenzie 3:03.3
3. Hamilton Anderson 3:05.0
400 MT FREESTYLE
1. Jim Eubank 5:53.0
2. Hamilton Anderson 6:35.1
3. John McKenzie 6:43.4
4. Norm Fitzgerald DNF
1500 MT FREESTYLE
1. Jim Eubank 24:06.2
2. Hamilton Anderson 26:49.0
3. John McKenzie 27:50.5
4. Eriquel Barajas 46:50.2
50 MT BUTTERFLY
1. Wally Pfeiffer 38.7
2. Hamilton Anderson 1:03.2
3. Doodles Weaver 1:29.5
100 MT BACKSTROKE
1. John McKenzie 1:34.2
2. Walt Pfeiffer 1:39.2
3. Hamilton Anderson 1:42.5
4. Floyd Stauffer 1:54.4
100 MT BACKSTROKE
1. Walt Pfeiffer 1:33.7
2. J. English Smith 1:47.0
3. Floyd Stauffer 2:01.0

4. Hamilton Anderson 2:07.7
150 MT INDIVIDUAL MEDLEY
1. Walt Pfeiffer 3:17.7
2. Hamilton Anderson 4:09.7
60-64
100 MT FREESTYLE
1. Lyle Collier 1:10.6
2. Reg Richardson 1:13.8
3. Oscar Simmons 1:16.8
200 MT FREESTYLE
1. Lyle Collier 2:31.7
2. Reg Richardson 2:52.5
400 MT FREESTYLE
1. Louis Nagy 6:35.8
2. Reg Richardson 6:37.8
3. Buster Crabbe 6:40.9
4. Oscar Simmons 7:15.2
5. Leonard Chapin 7:56.9
6. Russ Hargraves 9:07.3
1500 MT FREESTYLE
1. Buster Crabbe 26:11.3
2. Lewis Nagy 26:29.8
3. Al Guth 29:06.8
4. Rufus Clark 31:08.9
5. Leonard Chapin 31:13.2
6. Bill Voss 33:27.8
7. Russ Hargraves 37:57.4
50 MT BUTTERFLY
1. Mel Maxwell 41.9
2. Bill Loughborough 48.1
3. Al Guth 50.6
4. Leonard Chapin 53.7
100 MT BACKSTROKE
1. Tom Monahan 1:34.2
2. Frank Booth 1:36.0
3. Gordon Corson 1:39.9
4. Oscar Sigrist 1:46.0
5. Mel Maxwell 1:49.8
6. Russ Hargraves 2:19.3
100 MT BREASTSTROKE
1. Rufus Clark 1:45.9
2. Reg Richardson 1:47.3
3. Bill Loughborough 1:49.5
4. Frank Booth 1:54.0
5. Sam Bernstein 1:58.0
6. Mel Maxwell 1:58.3
7. Oscar Sigrist 2:00.0
150 MT INDIVIDUAL MEDLEY
1. Reg Richardson 2:25.3
2. Buster Crabbe 2:26.3
3. Frank Booth 2:31.1
4. Gordon Corson 2:36.3
5. Bill Loughborough 2:42.5
6. Oscar Sigrist 2:45.2
7. Mel Maxwell 2:46.8
65-69
100 MT FREESTYLE
1. Bill Greer 1:30.2
200 MT FREESTYLE
1. Bill Greer 3:34.0
2. Al Kallunki 3:37.3
400 MT FREESTYLE
1. Al Kallunki 8:00.0
2. Bill Greer 8:22.8
1500 MT FREESTYLE
1. Al Kallunki 32:28.4
2. Bill Greer 33:43.0
50 MT BUTTERFLY
1. Ed Pool 1:38.1
100 MT BREASTSTROKE
1. Winston Krats 1:51.3
2. Ed Pool 4:24.5
70-over
200 MT FREESTYLE
1. John Whittemore 5:21.7
1500 MT FREESTYLE
1. R. S. McCarthy 44:42.3
100 MT BREASTSTROKE
1. John Whittemore 2:45.7

NORWICH ELKS MASTERS SWIM MEET
July 2, 1972 Norwich, New York

WOMEN
25-34
100 YD FREESTYLE
Jenny Stephanos, 34 1:09.1
Gillian Ratcliff, 33 1:09.7
Wendy Stein, 25 1:13.2
Jeanne Hunise, 33 1:29.7
Sandra Smith, 28 1:37.8
Tana DeHott, 25 2:05.0
500 YD FREESTYLE
Ginny Stephanos, 34 7:11.7
Joanne Hunise, 33 7:22.9
Sandra Smith, 28 10:01.4
50 YD BUTTERFLY
Ginny Stephanos, 34 33.3
Gillian Ratcliff, 33 35.8
Hope Hansel, 26 44.4
100 YD BACKSTROKE
Ginny Stephanos, 34 1:22.1
Jane Hanson, 32 1:41.3
Hope Hansel, 26 1:42.1
Tana DeHott, 25 2:08.8
100 YD BREASTSTROKE
Gillian Ratcliff, 33 1:33.4
Jane Hanson, 32 1:47.9
100 YD INDIVIDUAL MEDLEY
Ginny Stephanos, 34 1:19.7
Gillian Ratcliff, 33 1:21.8
Hope Hansel, 26 1:41.9
Jane Hanson, 32 1:43.1

35-44
100 YD FREESTYLE
Pat Clinton, 44 1:09.5
June Gravenor, 41 1:23.8
Evelyn Keating, 39 1:31.0
Jane Huber, 39 1:33.9
Winnie Preston, 35 1:47.4
Barbara Booker, 36 1:54.0
500 YD FREESTYLE
Pat Clinton, 44 8:06.0
June Gravenor, 41 8:59.8
Winnie Preston, 38 10:37.0
50 YD BUTTERFLY
Pat Clinton, 44 39.2
Evelyn Keating, 39 49.6
100 YD BACKSTROKE
Pat Clinton, 44 1:26.2
Jane Huber, 39 1:39.9
Evelyn Keating, 39 1:45.5
June Gravenor, 41 1:53.0
Renene Ashford, 41 2:09.5
100 YD BREASTSTROKE
June Gravenor, 41 1:40.4
Renene Ashford, 41 1:46.0
Barbara Booker, 36 2:02.0
Sandra Wilkins, 36 2:17.9
100 YD INDIVIDUAL MEDLEY
Pat Clinton, 44 1:20.4
June Gravenor, 41 1:38.1
Jane Huber, 39 1:48.3
45-54
100 YD FREESTYLE
Dorothy Donnelly, 50 1:16.1
Betty Echentile, 47 1:39.1
Merle Leahy, 47 2:02.5
500 YD FREESTYLE
Betty Echentile, 47 10:01.2
Merle Leahy, 47 12:59.1
50 YD BUTTERFLY
Dorothy Donnelly, 50 45.7
100 MT BACKSTROKE
Dorothy Donnelly, 50 1:30.0
Betty Echentile, 47 1:48.8
Bepny Lupinski, 45 2:12.5
Merle Leahy, 47 2:17.6
100 YD BREASTSTROKE
Bepny Lupinski, 45 1:49.5
Valma Grant, 45 2:03.2
Betty Echentile, 47 2:17.2
100 YD INDIVIDUAL MEDLEY
Dorothy Donnelly, 50 1:34.2
Betty Echentile, 47 2:13.3
55-64
100 YD FREESTYLE
Ruth Lechner, 59 1:59.1
500 YD FREESTYLE
Ruth Lechner, 59 11:37.
55-64
100 YD FREESTYLE
Ruth Lechner, 59 1:59.1
500 YD FREESTYLE
Ruth Lechner, 59 11:37.1
100 YD BACKSTROKE
Ruth Lechner, 59 2:26.0
100 YD BREASTSTROKE
Ruth Lechner, 59 2:20.2
MEN
25-34
Dick Chelskia, 25 55.7
John Miers, 29 57.9
Phil Goode, 29 59.5
Jim Slater, 25 1:00.0
Bernie White, 28 1:05.6
Art Stockin, 32 1:06.9
Burns, 33 1:46.3
500 YD FREESTYLE
Dick Chelskia, 25 5:40.1
Phil Goode, 29 6:18.1
John Miers, 29 6:53.6
Jack Leahy, 28 7:40.8
50 YD BUTTERFLY
John Hunter, 25 25.9
Dick Chelskia, 25 26.1
Phil Goode, 29 27.3
Jim Slater, 25 28.1
Roy Staley, 27 28.6
Bernie White, 28 29.6
Dan Levy, 30 29.9
John Miers, 29 30.2
100 YD BACKSTROKE
Dick Chelskia, 25 1:05.6
Allen Cunningham, 30 1:06.9
Phil Goode, 29 1:09.9
Roy Staley, 27 1:12.6
Tom Brown, 29 1:18.0
Art Stockin, 32 1:28.6
100 YD BREASTSTROKE
Seely Scott, 28 1:15.1
Jim Nash, 29 1:20.7
John Miers, 29 1:25.3
100 YD INDIVIDUAL MEDLEY
John Hunter, 25 1:02.2
Dick Chelskia, 25 1:02.8
Phil Goode, 29 1:05.6
Allen Cunningham, 30 1:06.7
John Miers, 29 1:09.8
Roy Staley, 27 1:10.8
Tom Brown, 29 1:13.4
Scott Seely, 28 1:19.5
Tom Colgrove, 32 1:26.0

35-44
100 YD FREESTYLE
Jon Bussard, 37 56.4
Charles Stephanos, 44 58.3
Mel Siebold, 37 59.5
Al Stein, 43 1:07.7
Edward Leahy, 44 1:09.1
Tom Davenport, 38 1:09.2
J. R. Hamilton, 36 1:13.4
Hickey 1:19.4
Bill Russell, 38 1:32.2
F. F. Elkins 1:45.3
500 YD FREESTYLE
Mel Siebold, 37 6:22.7
Charles Stephanos, 44 6:32.2
Al Stein, 43 7:28.5
Edward Leahy, 44 7:57.1
Gene Haberstock, 39 8:05.8
J. R. Hamilton, 35 8:34.9
50 YD BUTTERFLY
Charles Stephanos, 44 31.1
Al Stein, 43 33.0
100 YD BACKSTROKE
Al Stein, 43 1:29.6
J. R. Hamilton, 36 1:49.2
Cliff Elkins, 40 2:23.7
100 YD BREASTSTROKE
Jon Bussard, 37 1:13.9
Al Stein, 43 1:23.5
Joseph Edwards, 41 1:59.7
100 YD INDIVIDUAL MEDLEY
Jon Bussard, 37 1:05.1
Mel Siebold, 37 1:12.2
Al Stein, 43 1:16.4
45-54
100 YD FREESTYLE
George Vandornolew, 46 59.7
B. V. McCarthy, 51 1:08.1
Jim Forbes, 46 1:12.9
Bill Taylor, 46 1:18.0
McCormick 1:20.6
George Echentile, 45 1:27.9
500 YD FREESTYLE
George Van Dornolew, 46 7:00.8
B. V. McCarthy, 51 8:16.4
Jim Forbes, 46 8:18.5
George Echentile, 45 11:19.9
50 YD BUTTERFLY
George Vandornolew, 46 35.0
Jim Forbes, 46 39.0
100 YD BACKSTROKE
Harold Dike, 54 1:39.0
George Echentile, 45 1:55.8
100 YD BREASTSTROKE
Jim Forbes, 46 1:24.0
Leo Taramette, 45 1:42.8
Harold Dike, 54 1:50.2
100 YD INDIVIDUAL MEDLEY
George Vandornolew, 46 1:15.5
Jim Forbes, 46 1:27.5
Bill Taylor, 46 1:44.1
George Echentile, 45 1:47.3
55-64
100 YD FREESTYLE
Bill Parmalee, 57 1:13.5
John Lechner, 63 2:00.9
500 YD FREESTYLE
Buster Crabbe, 66 7:30.6
Bill Parmalee, 57 8:10.1
John Lechner, 63 12:50.8
TEAM SCORES
Norwich Elks AC 153
Alfred Corning Clark Gym 112
Bethpage S.C. 52
New England Swim School 52
Ithaca AC 31
Bristol Girls Club 50

14TH CAPITOL CITY SWIM MEET
June 23, 24, 25 TOPEKA, KANSAS

WOMEN
35-44
50 MT FREESTYLE
1. Helen Buss 35.44
2. Frances Smith 45.56
3. Barbara Unruh 1:15.48
100 MT FREESTYLE
1. Helen Buss 1:18.69
200 MT FREESTYLE
1. Helen Buss 2:47.30
400 MT FREESTYLE
1. Helen Buss 5:54.70
50 MT BUTTERFLY
1. Helen Buss 40:11
100 MT BUTTERFLY
1. Helen Buss 1:32.84
50 MT BACKSTROKE
1. Alice Vernon 56.03
2. Arlene Parman 1:23.40
3. Barbara Unruh 1:33.84
100 MT BACKSTROKE
1. Helen Buss 1:33.51
2. Alice Vernon 2:07.93
50 MT BREASTSTROKE
1. Alice Vernon 55.94
2. Arlene Parman 1:11.73
200 MT INDIVIDUAL MEDLEY
1. Alice Vernon 4:41.1
45-54
50 MT FREESTYLE
1. Ruth Lawson 50.10
50 MT BACKSTROKE
1. Ruth Lawson 1:04.80
50 MT BREASTSTROKE
1. Ruth Lawson 58.25
100 MT BACKSTROKE
1. Ruth Lawson 2:18.10
60-64
50 MT BACKSTROKE
1. Elizabeth Hiebert 1:17.1
MEN
25-34
50 MT FREESTYLE
1. Bruce Svart 29.09
2. Dick Reamon 30.16
3. Lynn Weaver 31.05
4. David Reynolds 32.78
200 MT FREESTYLE
1. Richard Laird 2:51.61
400 MT FREESTYLE
1. Richard Laird 6:36.94
1500 MT FREESTYLE
1. Richard Laird 27:19.79
50 MT BUTTERFLY
1. Dick Hopkins 28.60
2. Dick Reamon 33.44
3. Bruce Svart 34.1
100 MT BUTTERFLY
1. Bruce Svart 1:22.22
2. Dick Reamon 1:24.81
50 MT BACKSTROKE
1. Lynn Weaver 35.75
2. David Reynolds 39.66
3. Richard Laird 43.70
100 MT BACKSTROKE
1. David Reynolds 1:26.26
2. Richard Laird 1:43.28
50 MT BREASTSTROKE
1. Joe Stocker 36.19
100 MT BREASTSTROKE
1. Joe Stocker 1:23.68
2. Richard Laird 1:53.78
200 MT BREASTSTROKE
1. Joe Stocker 3:16.11

200 MT INDIVIDUAL MEDLEY

1. Bruce Svart 3:53.92
2. Richard Laird 3:41.18
35-44
50 MT FREESTYLE
1. Jim Schlegel 35.00
100 MT FREESTYLE
1. Cal Bents 1:11
200 MT FREESTYLE
1. Cal Bents 2:44.54
400 MT FREESTYLE
1. Cal Bents 6:01.75
1500 MT FREESTYLE
1. Cal Bents 23:58.43
50 MT BACKSTROKE
1. Cal Bents 40.61
2. Jim Schlegel 43.06
100 MT BACKSTROKE
1. Cal Bents 1:31.54
200 MT BACKSTROKE
1. Cal Bents 3:38.56
45-54
50 MT FREESTYLE
1. Paul Rutinger 30.29
2. Robert Harding 30.74
3. Bill Simpson 35.76
4. Carl Gray 50.70
100 MT FREESTYLE
1. Paul Rutinger 1:07.24
2. Bill Simpson 1:25.76
200 MT FREESTYLE
1. Paul Rutinger 2:33.5
2. Bill Simpson 3:23.19
400 MT FREESTYLE
1. Paul Rutinger 5:32.9
2. Bill Simpson 7:62.94
1500 MT FREESTYLE
1. Bill Simpson 30:49.52
50 MT BUTTERFLY
1. Paul Rutinger 34.00
100 MT BUTTERFLY
1. Paul Rutinger 1:22.89
100 MT BACKSTROKE
1. Bill Simpson 50.76
50 MT BACKSTROKE
1. Bill Simpson 50.76
50 MT BREASTSTROKE
1. Bill Simpson 41.71
100 MT BREASTSTROKE
1. Bill Simpson 1:42.46
200 MT BREASTSTROKE
1. Bill Simpson 3:50.06
RELAYS
200 Free Relay
200 FREESTYLE RELAY - W
1. Topeka Swim Club 3:27.4
Parman, Lawson, Vernon, Smith
200 MEDLEY RELAY - W
1. Topeka Swim Club 4:07.10
Parman, Lawson, Vernon, Smith
200 FREESTYLE RELAY - M
1. Omaha Westside 2:27.91
Bents, Stocker, Zweifelbeck, Harding
2. Topeka Swim Club 2:38.18
Simpson, Killinger, Schlegel, Laird
200 MEDLEY RELAY - M
1. Topeka Swim Club 2:25.87
Simpson, Gray, Schlegel, Laird
2. Omaha Westside 2:28.07
Bents, Stocker, Zweifelbeck, Harding

Masters Swim Records ..... Long Course

Table with columns for Women LC (25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74) and Men (25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74). Rows include 50 Free, 100 Free, 200 Free, 400 Free, 1500 Free, 100 Back, 200 Back, 100 Breast, 200 Breast, 50 Fly, 100 Fly, 200 I.M., and Men's 50 Free, 100 Free, 200 Free, 400 Free, 1500 Free, 100 Back, 200 Back, 100 Breast, 200 Breast, 50 Fly, 100 Fly, 200 I.M.



## Poenisch; I've Never Been More Tired

Fifty-eight year-old Walter Poenisch, was pulled from the ocean after completing nearly 100 miles of his marathon swim from Cuba to Ft. Lauderdale because of the threat of sharks. He left the water and the uncertain safety of his homemade shark cage after a pack of sharks attacked the cage.

Poenisch was examined by Dr. Walter A. Fox upon returning to Ft. Lauderdale. Dr. Fox said Poenisch's blood pressure was 140 over 82, which was better than before he left for the swim.

"I started out too fast," the weary Poenisch said. The first 12 hours went smoothly but then the fumes from the boat made him ill. But, determined to continue, he gradually began to regain strength. Then came the sharks. One by one, they started collecting around the 30x15 foot net and finally, in a frenzy, they attacked the net.

"All I can say," said the 58-year-old Poenisch, "is that it is a hell of a long way to swim. Without the sharks and the gas fumes I think I could have gone another 60 or 70 miles. I have been tired before after some tough swims, but I've never been more tired than I am now."

Walter Poenisch must now turn his energies to another direction. His 25-year-old wife wants children. "Get the basinette ready," Poenisch said.

Staff photo by Mel Kenyon

**POENISCH TIRED BUT GLAD TO BE BACK**  
... even though he felt he could have gone on if ...



## AT LOS ANGELES

The above pictures are from the scrapbook of Mildred and Ham Anderson. They were snapped recently during the SENIOR SPORTS INTERNATIONAL held at the Coliseum in Los Angeles on June 24th and 25th. Top left: Jim Eubank, John McHensie, Ham Anderson, Walter Pfeiffer. Top middle: Annette Pfeiffer, Anne Adams, Mildred Anderson. Top right: Bump Jones and Ham Anderson. Bottom left: Mildred Anderson, Buster Crabbe, Ham Anderson. Bottom middle: Mildred Anderson, Cease Brown. Bottom right: Martha Masen Chapin and her former coach, Mildred Anderson.

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Athletes  
Swim  
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Exercise  
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