IRON GAME HISTORY

VOLUME 2 NUMBER 5

The History of STRENGTH TRAINING FOR ATHLETES AT THE UNIVERSITY OF TEXAS

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alph Hammond worked out all summer and he worked out hard. The college football season would begin before long and he wanted to be ready, so most mornings he'd be on the running track by daybreak for a few easy miles and some speed work, maybe even some stadium stairs. But his main workout came later, in the early after-

noon, when he'd begin each session with stretching exercises on a wrestling mat in a wooden annex of the main gym at the University of Texas in Austin.

He'd bend and twist and coax his body into increasingly extreme positions for 15 to 20 minutes, proceed to a few basic calisthenics moves to warm up even more and then he'd wrestle whoever happened on any given day to be both available and willing. The annex wasn't air-conditioned, but even in that withering Texas heat he'd stay on the mat as long as he could find someone to work with. And then came the weights—snatches and cleans and presses and curls, set after set. Thus it was that when the fall came he was ready.

One might ask, "So what else is new?" The young man runs, he stretches, he gets in a little combat on the wrestling mat and he lifts weights—more or less how any serious athlete with a yen to play college ball would spend his summer. Except for one telling difference. Hammond's sweat fell not this year, nor the year before that but in the summer of 1927, a year distinguished by 60 home runs off the bat of Babe Ruth, the Dempsey-Sharkey fight, Lindbergh's conquest of the Atlantic and the trial of Sacco and Vanzetti.

The football coach at U.T. at that time was Clyde Littlefield, who is best remembered for his long and successful tenure as track coach there from 1921 to 1961, but those were the days of the allrounders—athletes as well as coaches were often two or three sport men. And when Hammond, who had never played a single down, decided to try out for football, Littlefield had just been proffered the head job. The new coach knew football well enough to be skeptical that anyone with no experience at all would be able to make the varsity squad at a school the size of Texas. Littlefield knew, of course, of Hammond's former NCAA championship in wrestling and he knew about Hammond's ability as a pole-vaulter but this was *football*. Littlefield had to be shown. Hammond and Littlefield are both dead now, as is another important man in this

story, Roy J. "Mac" McLean. McLean was then U.T.'s coach of wrestling, at that time a varsity sport at the school, and it was at his urging that Littlefield promised to give Hammond a fair chance to make the football team.

"I knew what a good athlete Ralph was and I knew how rugged he was and I felt sure he'd do well," the 86 year old McLean recalled several years ago. "I'd worked with him all that summer and I'd gotten him to where he was really pushing hard with the weights, He wasn't an overly big man—about 5' 10" and 180 pounds—but he was strong as a thousand dollar mule and he could go all day. I still remember how bad he tore those boys up when football practice began, especially late in the afternoon when they began to play out. Back then the boys all just showed up in the fall and played their way into shape. They didn't have any kind of a summer program—nobody did—and so once they got a little tired Ralph almost killed them. Nobody even wanted to scrimmage with him."

Off to such a bodacious start, Hammond went on that year to secure a place on the first team and, of course, a varsity letter before going back to his truest love-wrestling-in which sport he placed fourth in the 174 pound class in the 1928 Olympic Games, losing the bronze medal on a technicality.²

It's impossible, of course, to know how much of Hammond's success in football resulted from his superb conditioning and how much resulted from his no doubt considerable genetic gifts, but it seems safe to say that the extra strength, stamina, and suppleness he built that summer lifting weights and wrestling made him more of a man in those essential characteristics of an athlete than he otherwise would have been. "All that weight work damn sure didn't *hurt* him." McLean was quick to assert. Even after all those years McLean was still bemused by how long it had taken for the rest of the coaching and physical education fraternities to catch up to what he and a few others were doing with their athletes more than 60 years ago.³ But the rest of the coaches have caught up now with a vengeance; almost every feature article about a modern athlete will make mention of that athlete's conditioning program. Even more revealing is the recent explosive growth of the coaching subspecies known variously as the strength coach or weight coach. Twenty years ago strength coaches were as rare and exotic as whooping cranes but now their habitat has expanded far beyond the occasional pro or major college football program to other major sports, to minor sports, to small colleges,

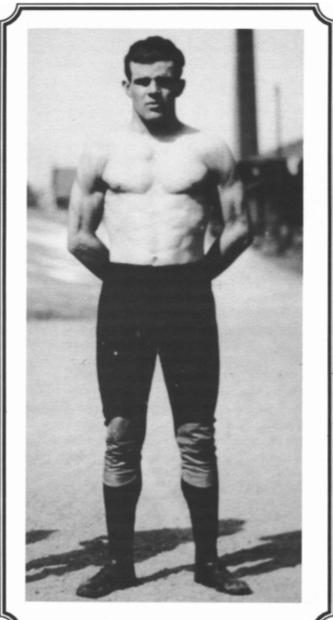


to high schools and, of late, to women's athletics. They have even formed an Association.

The National Strength Coaches Association—now called, in an understandable but semantically shaky attempt to lay claim to all aspects of physical fitness, The National Strength and Conditioning Association —was founded by Nebraska strength coach Boyd Eppley and a handful of fellow weight men in 1978, but it now has 11.000 members in 50 countries. The NSCA sponsors regional and national clinics and they publish four informative journals filled with a combination of articles representing various conditioning philosophies, research studies and advertisements for training equipment and so-called nutritional aids.4 growth has, of course, paralleled that of the mushrooming fitness field and is both a recipient of and a donor to that growth. Where it will stop is difficult to predict. Even now many conditioning coaches speak a language that is becoming increasingly inaccessible to the average person, as the language of priesthoods usually tends to do. Terms such as proprioceptive neuromuscular facilitation, valsalva maneuver, general adaptation syndrome, eccentric contraction, gigabites, depotestosterone, and sensory deprivation tank now float through the liniment-scented locker rooms of America. In any case, it might be

instructive to examine what has happened through the years at the University of Texas in both men's and women's athletics as a way to understand how we got from Ralph Hammond to where we are today.

To understand Ralph Hammond, though, we have to under-



Wrestler Ralph Hammond as he looked after he had begun to train with weights. Photo: Todd-McLean Collection, The University of Texas.

stand Mac McLean and to understand Coach McLean we have to go back to two other fascinating men-L. Theo Bellmont and H. J. Lutcher Stark. Stark was the heir to an East Texas empire built around timber and oil, and he enrolled at U.T. in 1905, bringing to campus two years later the first student-owned private automobile. He was an energetic young man, and he served his beloved school as the business manager for the football team in 1910negotiating with other universities and scheduling games.⁵

After Stark finished his year as the business manager of the football team, he drove up the bad roads from his home in Orange almost every week to see his friends and stay in touch with things athletic. He also loved to eat, and by 1913 he weighed over 200 pounds, far too much for his 5'7" height and bone structure, so he decided to go to Philadelphia for a course of physical training under the personal supervision of Alan Culvert, owner of the Milo Barbell Company and publisher of Strength magazine. Stark spent two months there and then returned home 40 pounds lighter, twice as strong and an ardent champion of the merits of progressive resistance exercise.⁶

In 1914, however, weightlifters were about as scarce in Texas as *entrechats*, and Stark didn't have a fellow enthusiast to talk to until he met Theo Bellmont in 1914. Stark

convinced Bellmont to give up the directorship of the Houston YMCA and to join U.T. as the school's first athletic director. Bellmont had been an outstanding collegiate athlete at the University of Tennessee, and after taking the YMCA job in Houston he came under the influence of a gifted acrobat and lifter, who initiated him into the

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European tradition of the weightlifter/athlete. So, when Bellmont came to Austin he brought several sets of dumbells with him, along with a belief in the efficacy of this form of physical training. As for Stark, he never failed to haul a Milo barbell or two to Austin in the trunk of his Rolls Royce on his weekly trips to the campus, and a pattern soon developed that saw the two men engaged in regular sessions of weight training.

That first year—1914—Bellmont introduced Stark to a slender young man and Stark and Bellmont both introduced the young man, freshman Mac McLean, to the weights. McLean asserted that the example of those two men and the lifting lore they taught him changed his life. Stark by then had left one of his Milo sets in Austin, and McLean soon ordered another and over the next five years Mac ran, wrestled, and lifted, adding 35 pounds of useful weight to his lanky frame and becoming a much better athlete in the process. And as he lifted and played sports he began to read Calvert's magazine and anything else he could get his hands on about this fascinating "new" form of exercise.

By 1919 McLean had graduated and been hired by Bellmont as an Instructor in Physical Training at the university. That same year Mac asked for and received Bellmont's approval to teach a weight training course, perhaps the first such course of its kind in the U.S. at a major university. In that class and the hundreds which followed it during McLean's almost 50 years of teaching at U.T., he tested and measured his students both before and after their semester of training. This testing and measurement proved to them as well as to himself that, contrary to current belief, significant all around physical improvement could be produced rapidly by hard work with the weights. He also put this new knowledge to work as a coach.

In 1920, McLean's duties were expanded to include coaching the newly formed cross country team, and for 13 seasons—until he stepped down—his men won the Southwest Conference championship every year. Throughout those years Mac encouraged many of his harriers to train with weights, unheard of though this practice surely was. But it was with his wrestlers that he was most insistent about the capacity the weights had to produce a winning edge. McLean was named to coach the Longhorn wrestling team when the sport resumed its varsity status in 1923, following a hiatus occasioned by WWI, and for four years, until wrestling was dropped by the Southwest Conference and by Texas as a major sport, McLean's wrestlers proved again and again that lifting neither slowed them nor bound their muscles.

But even with such examples as Hammond, plus occasional hints from Bellmont and McLean, the other coaches at U.T. were reluctant to employ weight training as a conditioning aid. So thoroughly convinced were they and their coaching brethren throughout the U.S. that lifting would make a man tight and clumsy that any

successes enjoyed by weight trained athletes were summarily dismissed as exceptions which proved the rule. The reasons for this wrongheaded attitude are too complicated to explain in this article, but it was certainly true that throughout the first half of the 20th century, weight training was disapproved of by almost all coaches and physical educators.

Narcissism was in both principle and practice far less acceptable in those naturalistic days than it is now. In football, for instance, it was thought almost unmanly to do too much preparation for fall practice. "Hell, fall pactice was preparation," was the way Bully Gilstrap, a former Texas player and coach, put it. Gilstrap is dead now, but he was a football man nearly all his life. He came to U.T. as a freshman in 1920 and he was an outstanding athlete during his college career, lettering in basketball and track as well as in football. He returned to U.T. to coach in 1937 and remained on the staff for 20 years. ⁷

Gilstrap remembered his playing days. "Most of the old boys on the team came off the farm like I did and we were in pretty good shape from hauling hay, chopping cotton, cutting wood, and milking, but the only running I did back then was to race somebody or to try and catch one of them old jackrabbits. You got to remember how different things were then. Hell, I won the state track meet running *barefoot*."

By the time Gilstrap came back to U.T. in 1937, everybody did have shoes, but preseason conditioning for any varsity sport was still almost non-existent. "Things were about the same in '37," he said, "'cept we had a training table so they wouldn't none of 'em have to go through school on chili like I did. But all we did to warm up and all was a few jumping jacks. Then we'd run plays or scrimmage. It was pretty much the same in basketball and track, too. The boys scrimmaged in basketball and they practiced their events in track. That was it. I don't know what they done in baseball." As far as baseball is concerned, the words of the late Bibb Falk are instructive. Falk played at Texas for three years, beginning in 1917, then went straight to the big leagues where he played for 12 seasons. He returned to Austin in 1932, served as assistant coach until 1940, then coached the Texas team until 1968.

"We did a little of what we called P.T. in the early days, but only when it rained. Other than that the boys ran and threw and played. We wanted long, loose muscles and the word back then was that lifting would tie you up. To be honest I never even heard of a ballplayer using weights. Not in college and not in the bigs. Now Hack Wilson and Babe and some of the others did a lot of lifting all right but it was done a glass of beer at a time. The key to baseball is power and power comes from speed and we were leery of anything that might slow us up. When I played and for most of my coaching career we always believed that if a man ran enough and threw enough he'd be strong enough."



This play-yourself-into-shape attitude prevailed in pre-World War II U.T. tennis and golf as well, but "Tex" Robertson, who coached swimming from 1935 until 1950, used a variety of conditioning techniques for his athletes. He recalls, "We used the 'torture belt,' before anyone did. It was a sort of harness tied to surgical tubing attached to the side of the pool. I'd have my guys swim against the pull of the tubing and I also had them do wall pulley exercises simulating the various strokes. We did a lot of different things. I remember we always did 15 leg lifts and 32 sit-ups before we swam because some U.T. phys. ed. instructor believed in it, but we did no stretching and no weightlifting." Robertson shared the fears of his coaching contemporaries about heavy weight work. "We wanted the long, loose muscles you need in swimming and we'd all heard stories about guys who'd messed themselves up by doing too much, so we stayed away from lifting." Before and during the second World War, the individual coaches designed and implemented whatever conditioning routines their players followed, but in 1945 a man came to Austin who was instrumental over the next three decades in designing the workout program for many U.T. athletes. Only 4' 10" tall, Frank Medina had a larger than life impact on the minds and bodies of the Longhorns for 32 years, until he retired in 1977 at the age of 70.

"We never used weights in my early days here because the coaches just didn't want to. And neither did any other coaches in the country, "he explained. "The coaches



Roy J. "Mac" McLean (right) with Terry Todd in the Physical Culture Collection, just before McLean's death.

McLean taught what may have been the first weightlifting class for credit at a major university in the United States. McLean was an early practitioner of weight training for athletics and his varsity athletes in both cross country and wrestling did resistance training in the 1920s. McLean was also instrumental in establishing the Todd-McLean Physical Culture Collection at the University of Texas at Austin.

Photo by Jan Todd.

here all wanted their players to be quick. And I didn't believe in it either. I still don't believe in all that heavy stuff. I always said that if God wanted a boy to be bulgy, He'd have made him bulgy. Some of the football players these days look like *weightlifters*. That's not good."

Medina's views on lifting were formed in the early 1950s, when he saw a film about the conditioning program at Northwestern made during that university's glory days. The film recommended, among other things, light dumbell lifting, and Medina took the recommendation to heart, never deviating from it during his many remaining years at Texas. "A pair of 20 or 25 pound dumbells is enough for anybody, no matter how big and strong he is," Medina maintained. "You need to see how many times a man can lift a light weight, not how much a man can lift once or twice. After we watched the Northwestern film, one of the things we did before spring training was to have the men wear ankle weights and waist weights and weight vests and lift the dumbells over their heads while they were jogging around in a heated locker room. I worked them hard."12

One thing is certain; those who went through the legendary "Medina Sessions" will never forget them, be they former players who look back with the fondness of survivors, as most do, or former players who look back with the bitterness and resentment of Gary Shaw, who wrote in *Meat on the Hoof*, his diatribe against Texas football:

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"After dressing the first day, Medina called us through the closed doors. The steam heaters in these two rooms pushed the temperature to 120 degrees... We ran in circles, crowded into one room, with the dumbells moving in an up-down motion. As soon as we stopped running, we were to stand perfectly straight with the dumbells held at arms' length from our chest...

"Each exercise would continue until someone faltered; for example, couldn't hold the weights up any more; whoever failed was made the center of a big production.

"Medina would..announce that they were responsible for our doing it all over again...

"Our last exercise using the dumbells was sit-ups. Usually we did a hundred at this point (anyone screwed up, we started over). But this day Medina didn't stop at a hundred...or two hundred or three hundred...nor four hundred or five hundred...

'Men, push yourselves, now's the time to find out...what you've got inside.'

"The concrete floor had rubbed us raw and most of our butts were bleeding. I was cut enough that I had trouble sitting for two weeks." ¹³

It is interesting that even those who feel nostalgic about such experiences recall many of the same details. Don Talbert, for instance, who was an All-American for Texas as a defensive tackle in 1961, remembers that heated locker room. "Man we used to fear those Medina sessions in that steamy locker room. We had to jog around with those damn little dumbells in each hand, around and around, with no water breaks allowed. And sometimes we'd do 400 or 500 sit-ups and get these big hickeys on our tails. It was an awful gut check but I reckon we lived through it." 14

But often, it seemed, just barely. Bud McFadden, who was an All-American at Texas in 1950 before going on to a fine career in the pros, laughs ruefully when he thinks back to those long gone days, "Frank Medina. That little bugger made us work all right. He thinned those walk-ons out with all that calisthenics work but the rest of us had to go through it too. Sometimes he'd keep at us and keep at us 'til I wanted to reach up and snatch him down off that bench. But I reckon he got us in shape, at least for those days. We did run too much, though. I know that. We ran so much our legs stayed dead. They didn't have time to recover from one day to the next." ¹⁵

One of the most difficult questions any conditioning coach must face is how to strike the correct balance between too much work and too little. Medina, although an extremist, was hardly alone in the way he drove his players. "Running is all the leg work any player needs," Medina staunchly maintained, "and lately they don't run 'em enough." Even today, the zeal of many coaches to leave no conditioning stone unturned often causes them to overwork their athletes, who thus become physically depleted, emotionally exhausted

and more liable to either infection or injury, even death. Over the years, however, as coaches have learned through trial and error as well as through the growing application of science to sport, the tendency to overwork or incorrectly work athletes has decreased. Seen from a distance, this decrease appears gradual; seen up close and individually, it has often been surprisingly sudden.

A case in point was the effect on Darrel Royal, U.T.'s outstanding football coach from 1956 to 1976, of the physical mauling his team suffered in 1959 at the hands of the LSU Tigers. Led by All-American Billy Cannon, the entire LSU team had been involved for two years in a vigorous weight training program designed and administered by Al Roy, a gym owner in Baton Rouge and former trainer of the U.S. Weightlifting team in the Olympics in 1948. In any event, the effect of Roy's weight program on the line of scrimmage in the LSU game was clearly not lost on the discerning eyes of Royal.

"We were beat up pretty bad that game and even though they had good personnel everyone was talking about their lifting program, so I figured it was time to move before we were left behind," he said recently. "I'd never lifted as a player and I'd always been warned away from it but you couldn't watch a man like Cannon run and still believe weights would slow you down. So I asked my people to begin looking into it and after a few years we worked into a program where all our players trained, even though it was mostly work on machines and lighter weights. We began to rely on it more and more, but it wasn't 'til we hired a full-time strength coach in 1977, my first year as Athletic Director, that it began to pay the kind of dividends we're enjoying today. These days, you've just got to have it. The players are much bigger now than they were when I played and started coaching and the main reason is all the weight work they do. If your team doesn't train and has to face an equally talented team that does, there's just no way you can win." ¹⁶

The greater size of modern football players is often remarked on these days, but a statistic that brings it into precise focus was offered up by the aforementioned Bully Gilstrap. "One thing I'll never forget," Bully recalled, his ruddy face squinting out over the vast farmland surrounding his home, "and that's the fact that when I started to play back in '20 there wasn't but two players—two!—in the whole damn Southwest Conference who weighed over 200 pounds. Think about it."

Sixty some odd, some very odd, years later, football is indeed a different game, and what with pharmacological incursions and more sophisticated methods of training, who can say the next 60 won't produce increases in size and strength equal to or even greater than what has gone before.

Basketball, for instance, has undergone a sea change in opinion on the subject of conditioning over the past years. The late Jack Gray, who coached Texas from 1935 to 1941 and then from 1945 to 1951,



remembered king fearful of the weights because of their supposed fell power to bind the muscles. 'We just played, that's all. We scrimmaged and worked on plays and did a little extra running. We wanted our boys to be lean as greyhounds." ¹⁸

Things continued in much this way in U.T. basketball until Harold Bradley put his team on a program of light circuit training in the early 1960s using a multi-station weight machine. It produced noticeable results for Bradley's men, most of whom were accustomed to lifting nothing heavier than their textboks.

After Bradley moved on in 1964, Leon Black, who now serves Texas as Assistant Athletic Director, took over and continued in a modified way what had already been begun. "The wind was blowing toward strength and bulk when I came," Black recalled, "but lots of us coaches were resistant. It's hard to change old habits, especially if you've had some success with them. We feared our players would lose finesse,

so I for one stayed away from any upper body work. Frank Medina was in charge of the early going when I came and he was opposed, too, so we just did a little leg work but I wish now we'd had them on the heavy stuff." 19

Of course, not everyone agrees with Black's assessment. Some coaches still privately admit to lingering skepticism about weight



This wonderful photo of the young Primo Camera gives some sense of his phenomenal natural size Camera lifted weights a bit as a young man and several sportswriters blamed his relative ineptitude in the boxing ring on his lifting, ignoring the fact that he had very little serious training in boxing before his promoters thrust him into bouts with much more experienced men.

Even so, he won most of his matches and, for a brief time, was world heavyweight champion.

Photo: Todd-McLean Collection The University of Texas at Austin. training king able to produce body weight and vertical leaping ability without some loss of agility or touch, and a few coaches have enough of the maverick in them that they don't mind swimming against the rising current.

One such coach was Black's replacement at Texas, Abe Lemons, who coached from 1976 until leaving under duress to return to his previous post at Oklahoma City College in 1982. Lemons is a witty, outspoken man and he happily voiced his reservations about the weights. "I'm not so sure the weights build muscles you really need. I do know you can't go to a coaching clinic these days without hearing a talk about one lifting program or another. Everybody's quick to jump on a successful bandwagon, even if they don't understand it. To me it's sorta much ado about nothing. I'm not so sure a lot of this stretching and lifting and all out gutcheck running isn't more for the coaches' benefit than the players. Our players used to scrimmage, shoot free throws, do floor drills and that's it. I know this may

make me sound frivolous but I don't *feel* frivolous. The funny thing, though, is that my kids heard so much about the weights and saw all the lifters on TV that almost all of them lifted *on their own*. Maybe it's better that way. At least *they* believed in it. I know Dana was mad at me because I didn't send my players to him but I just couldn't see it." ²⁰

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The Dana in question is a young man with the surname of LaDuc who, since 1977, has served U.T. Athletics as the strength coach. LaDuc was an outstanding shot-putter at U.T., winning the NCAA National Championship as a senior in 1976 and establishing, with a put of 67° 1/4", the longest heave on record for a left-hander. LaDuc believes with all his heart that the weights gave him the power to throw as far as he did and this belief shines forth in everything he does. He admits to having ken displeased that Lemons was unable to make that vertical leap of faith in the weights.

"It did tick me off a little that I could never convince Coach Lemons to let me work with his athletes. I'd worked with other basketball players and I knew for certain I could make them jump higher but he just never could see it. It's funny because after he left and a new coach came in and gave me the go-ahead, we increased the vertical jump of Lemon's own players by an average of a little over three inches in just a few months." ²¹

Clearly, two central truths now seems to be almost universally accepted: all things being equal, a stronger, more powerful athlete will be a better athlete in any sport, and resistance training is the most effective means of producing physical power. As these truths have enjoyed increasingly wide acceptance, the budgets of athletic departments around the country have found room for the personnel and equipment to put the truth into practice. Essentially the same pattern has been followed around the country as the role and responsibilities of the strength coach grew and as more and more men with a history as either a lifter, a thrower or a coach with a personal interest in the weights were hired on a year round basis by the various colleges in an effort to keep up with the LSU's of the athletic world. And as the strength coaches to handle this aspect of the program were added, so were the physical facilities to accommodate the hundreds of athletes who would use them.

During the early Medina session days at Texas, for example, there was no separate weight room for the athletes, and the trainers had to make do with the locker room and the great outdoors; but in 1965 a vault-like storage room on the second level of massive old Memorial Stadium was converted into a weight and rehab room for the varsity athletes. The late Cleburne Price, U.T.'s assistant track coach from 1964 to 1971 and head coach from 1971 to 1985, remembered with a laugh king put on the project. "We were shorthanded and didn't have too much money and I became known as the 'paint coach.' It's been fun to watch it grow here and I've seen it up close. When I came our throwers were already using weights—they were the only U.T. athletes who were using them then—but now all our guys do, and our women too. Even the cross country team. And now, thank God, when something needs to be painted, they don't call me anymore."²² But U.T.'s weight room, large as it was, became inadequate to handle the

growing numbers of athletes who trained there. So, with the full support of both Delos Dodds, Director of Athletics for Men and Donna Lopiano, the A.D. for women, plans were developed to build a facility which would include a state of the art 10,000 square foot weight room.

Part of the reason for the expansion was the fervor and frequency with which the current weight room was used by U.T.'s women. Back when they had only "club sports," a few of the women used the facility but, since 1976, when women's sports began to be propelled by the dual carburation of varsity status and dramatically increased funding, the women have become as avid as the men for their turn at the squat rack. Jody Conradt, who is both the successful head basketball coach for women (won 598, lost 144 as of the beginning of the 1992 seaon) and the Acting Athletic Director, has seen and been a part of these changes.

"When I came in 1976," she explains, "I had no experience with weight training at all but Dana convinced me it would help my players and he was absolutely right. At first some of the girls were reluctant to really try hard but after they saw how much better it made them look and play we didn't have to do any more selling. Our vertical jump went way up and so did our self confidence."²¹

Another coach of U.T. women athletes in the 1980's was Richard Quick, whose swim team won five NCAA championships. One of the varsity coaches who prefers to design and supervise his own weight program, Quick explained his position by saying, "I respect Dana's knowledge but since we have our own weight room here at the Swim Center and since weight training for swimmers has been a special interest of mine for quite a few years, I prefer to work with my women myself. I have them keep charts on themselves so they know exactly where they've been and I talk to them a lot individually so they know where I'm trying to take them and how we can get there quickest. And we really stress heavy weights."²⁴

Another coach who shares this attitude is Eddie Reese, who heads the men's swim team, a team which always finishes at or near the top in the NCAA meet. Reese not only believes in heavy work with the weights for his men, he believes in it for himself. "Our guys train with Dana because I know he pushes them. There's more weight over here. I work on the program design with Dana and we try to put in as much variety as we can. We do lots of stretching and we run the stadium steps and ramps and we do lots of rope climbing. We really train a lot like competitive powerlifters. We do heavy squats, benches and deadlifts and I mean heavy. We want to build overall body strength— core strength— and we think we *are* building it."²⁵

At Texas and, it seems, at every other college with a strength coach, opinions such as those given by Conradt, Quick, and Reese are the order of the day, regardless of the sport. Cliff Gustafson, for instance, coach of U.T.'s consistently outstanding baseball team—winners of



six National Championships—is an unreserved supporter of resistance training.

"I inherited an off-season program from Coach Falk when I came here in 1968 built around light free weights and Universal machines and I kept it 'til Nautilus came along and we switched to that. Dana oversees it for us and we're mighty pleased with it. There's no question in my mind that the players can hit the ball farther after they've trained for awhile. The ball jumps off the bat quicker because of the extra power they develop. In season, we use some free weights we've got over at our field. They're just as quick as they ever were, maybe quicker, and they have just as much finesse as they ever had, maybe more. They're just stronger." ²⁶

At Texas, it seems Abe Lemons was alone in his views. Besides the enthusiastic coaches already mentioned, all of the other varsity coaches avail themselves to some extent of the help offered by LaDuc and by the women's strength coach, Angel Spassov. As for the system of training Texas uses, it would be fair to say that LaDuc and Spassov use an eclectic, non-doctrinaire approach to conditioning, and they use many different tools in their sweaty trade. LaDuc: "We use free weights, we use various machines-including Nautilusand we use other methods of strength conditioning as well, such as ramp running: the Russian Leaper which involves trying to jump while you're king resisted by surgical tubing; rope climbing; and plyometrics, which involves jumping down from a box to the floor and then back up to a higher box. We use it all and we try to use it when it'll do the most good. And we work a lot on flexibility. Spanky Stephens, the head trainer here, and I talk over the entire program and he designs the running workouts. We have to coordinate the running and lifting or we'd be undoing each other's efforts."²⁷

But the doxology of LaDuc's and Spassov's training programs is one of praise to the same heavy lifts with barbells which built their own strength. Like most with their background, they are true believers, especially LaDuc, who is at his happiest when he is among his colossal boy-men, passing along to them by word and deed the articles of faith as they were earlier passed to him.

Late one spring several years ago LaDuc conducted a lifting competition between the football team's 50 best players—25 each from offense and defense. He invited the public to the contest and in front of assorted girl friends, local lifting fans, several coaches and members of the local sporting media, his players put on quite a show. The contest involved the squat, the bench press and the power clean—the three lifts which are the blood and bone of LaDuc's program for football. The men had chalk, they had belts, they had proper technique and they were geared for personal records. They'd been training with increasingly heavy weights for weeks with this contest in mind and they approached the bar with absolute seriousness.

When the chalk dust had finally settled the improvements over the previous years were substantial. Almost all of the men made at

least one personal record.

Watching Dana become increasingly excited and proud as the competition progressed and record after record fell to the onslaught of his puissant young bulls, it would have been natural to assume he was the happiest in a roomful of happy men. And no doubt he was, except perhaps for an old man who sat quietly during the long afternoon of lifting, smiling to himself from time to time and shaking his head in pleasure and disbelief as the big weights went up again and again. The old man was Mac McLean.

None of the young men had any idea who Mac was, of course, or what role he had played in the sequence of events which led them all to be there that day. But that didn't matter to Mac, since he had reached an age at which most good men look less for glory than for symmetry, for things turning out as they should. He was content deep down, in the way only the old can be contented, to be watching a performance whose whole meaning was that he and Theo Bellmont and Lutcher Stark and Ralph Hammond had been right, by God, all along.

Notes

- ¹ Roy J. McLean, interview with the author, 23 September 1983, Austin,
- ² David Wallechinsky, *The Complete Book of the Olympics* (New York: Penguin Books, 1984), 505.
- McLean interview.
- ⁴ The NSCA publishes: *The National Strength and Conditioning Association Journal, The Journal of Strength and Conditioning Research, The Journal of Personal Training and Conditioning for Cycling.* Membership data supplied by the NSCA office, January 15, 1993.
- ⁵ Roy J. McLean, "A History of U.T. Athletics," unpublished manuscript, McLean files, Todd-McLean Collection, The University of Texas at Austin.
 ⁶ Ibid
- ⁷ Bully Gilstrap, interview with the author, 15 August 1983, Rosebud, Texas.
- 8 Ibid.
- ⁹ Bibb Falk, telephone interview, 12 August 1984.
- ¹⁰Tex Robertson, telephone interview, 13 May 1984, Austin, Texas.
- ^{1 1}Frank Medina interview with the author, 27 April 1984, Austin, Texas.
 ^{1 2}Ibid.
- 13 Gary Shaw, Meat on the Hoof (New York: Dell, 1972), 110-6.
- 14Don Talbert, telephone interview, 25 January 1985, Austin, Texas.
- 15 Bud McFadden, telephone interview 2 February 1985, Austin, Texas.
- ¹⁶Darrel Royal, interview with the author, 7 March 1985, Austin, Texas.
 ¹⁷Gilstrap interview.
- ¹⁸ Jack Gray, telephone interview, 18 March 1985.
- ¹⁹Leon Black, interview with the author, 2 April 1985, Austin, Texas.
- 20 Abe Lemons, telephone interview, 8 April 1985.
- 21 Dana LaDuc, interview with the author, 15 April, 1985, Austin, Texas.
 22 Cleburne Price, interview with the author, 21 February 1985, Austin, Texas.
- ²³ Jody Conradt, interview with the author, 17 January 1985, Austin, Texas.
 ²⁴ Richard Quick, interview with the author, 5 December 1984,
 Austin, Texas.
- ²⁵ Eddie Reese, interview with the author, 9 December 1984, Austin, Texas. ²⁶Cliff Gustafson, interview with the author, 10 February 1985, Austin. Texas.
- ²⁷LaDuc interview.