



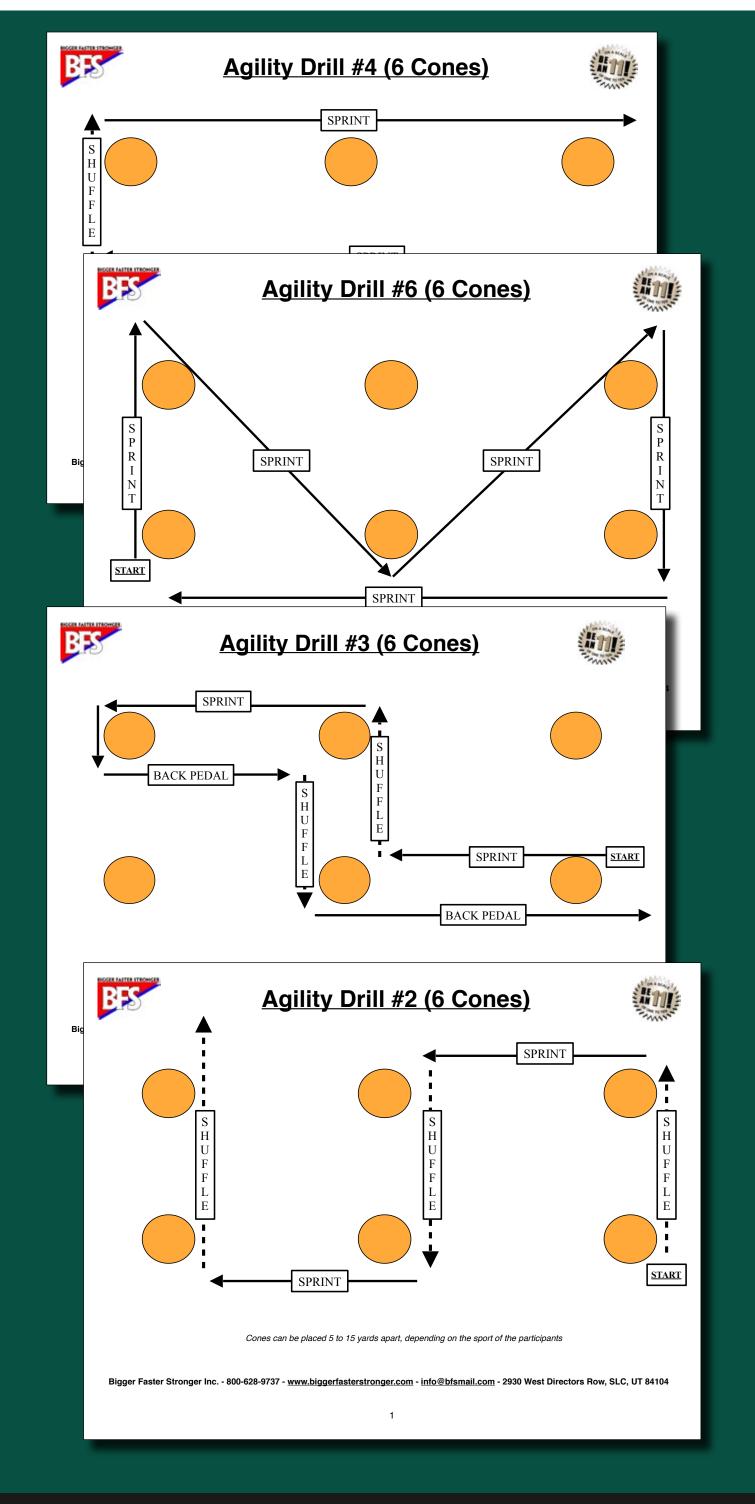




Download Your FREE ebook "25 Agility Drills" BFS is committed to helping coaches and teachers develop young bodies and these drills are perfect for any age, class or skill level! Run these drills for time and accuracy and have some fun with agility!



Spring Outside and Get on the Field!
25 drills for developing students and athletes in all sports and activities. Agility is one component and is a skill that can be enhanced through measurable drills record keeping. Use these drills and a stop watch and make some records!





The BFS Dot Drill Pad is the warm up foundation to all the work we do in the BFS Total Program. The BFS Dot Drill gives athletes a perfect start to get their muscles firing before a work out while building the agility and foot speed to compete on the field of play. We recommend two Dot Drill pads for every work out station. **ONLY \$49 EACH** 





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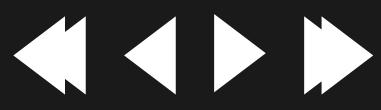
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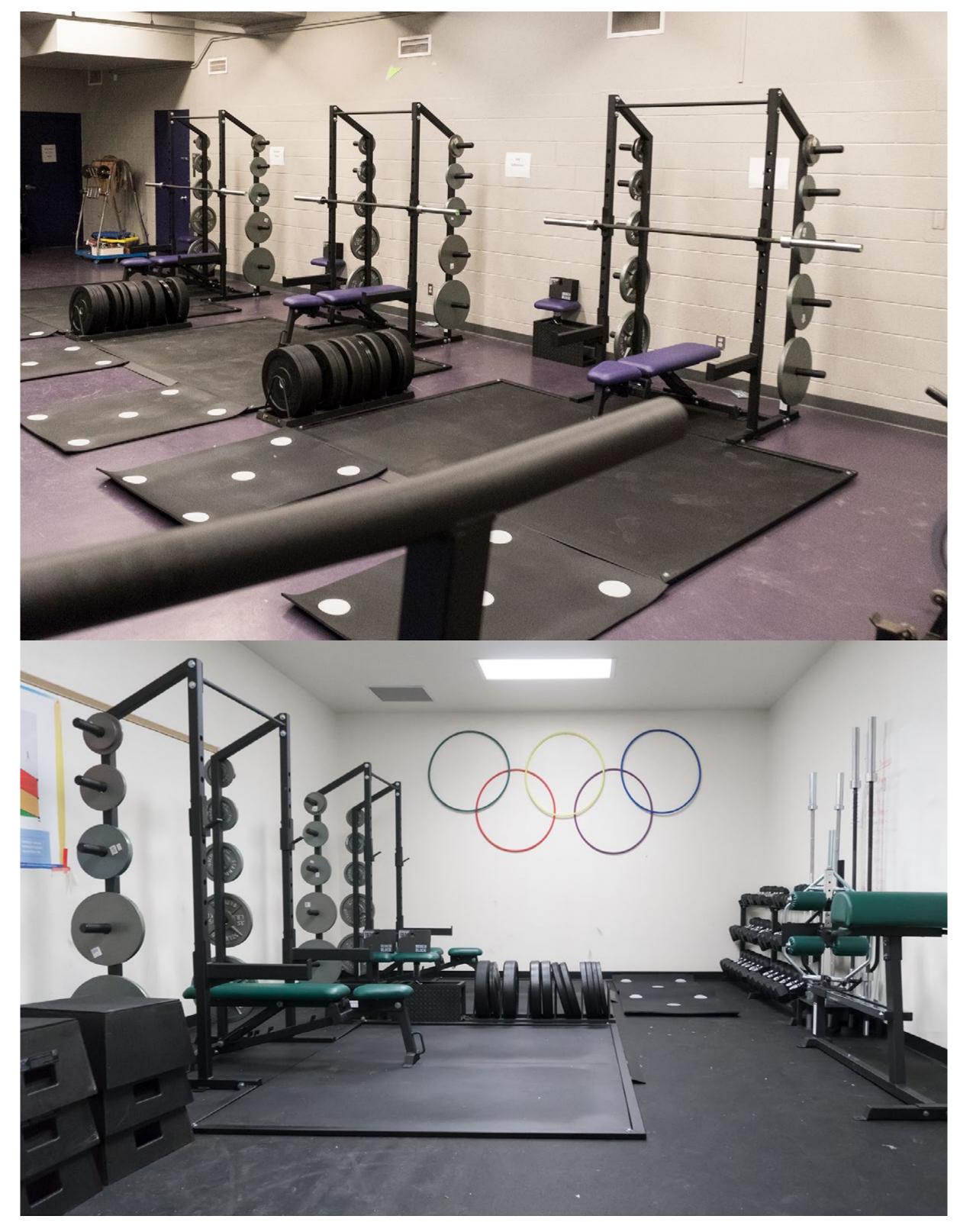
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# BFS recognizes that every school, gym, or program needs it's own unique training solutions

BFS proudly offers a wide variety of equipment lines to cover a multitude of requirments from our customers.

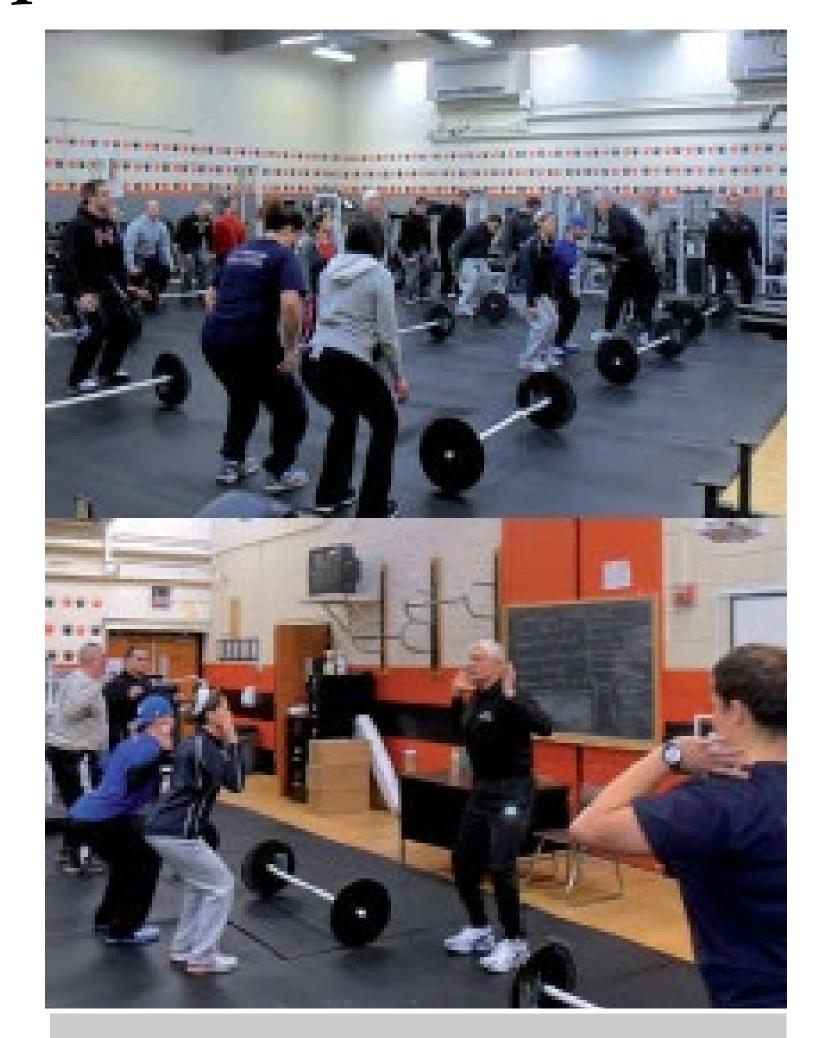
Among the most common issues are available space, number of potential users, and of course budget. By offering individual lines of equipment that each contain the core racks racks, benches and platform options, your gym or school can get exactly the weight room it needs and can afford.

Recently the Central Consolidated School District in New Mexico upgraded weight rooms in all it's High and Middle Schools. By working closely with BFS they were able to install exactly the equipment they needed into each facillity on budget. The middle school weight rooms shown here are built with the <u>Varsity Line</u> which are a great value and are built to commercial grade specifications.

Plus by working at the district level Central Consolidated was able to maximize thier buying power for six new weightrooms!







In January 2012 Mergardt gave a BFS certification at White Plains High School in White Plains, New York.

You have just received funds to improve your athletic facility – now what?

The best plan "begins with the end in mind," as suggested by Stephen Covey, author of The Seven Habits of Highly Effective People. Before tak-

## rogram, People, Product

BY ROD MERGARDT, BFS CLINICIAN, Originally Published November 2012

Three guidelines to remember when designing, building or renovating the college or high school weightroom.

ing any action, ask yourself, "How can this money pro-gram for the highest level of athletic perforimprove our facility to opti-mize the performance of our athletes and enhance the health and wellness of our students?" Our instinct might be to immediately acquire as much attrac-tive new weight training and cardio equipment as possible. It's a common pitfall for many administrators, teach-ers and coaches to move forward with purchases before designing an overall plan for the investment. However, unless we first address potential problem areas – in the equipment, the space, the level of instruction or the ages of the students and athletes – we're sure to face unnecessary financial and physical costs later. If a plan is sound and managed properly, there should be no damage to the equipment and no injury to students from improper use.

Here is the most effective and efficient process I have found as an athlete, educator and parent for build-ing a safe and fiscally responsible

mance enhancement: The 3 P's: Program, People, Product.

#### **Program**

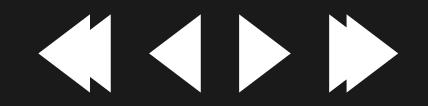
"Proper Prior Planning Prevents Poor Performance"

-Universal management axiom

Before setting out on any journey, we must know our destination. Although it's not possible to predict every bump in the road, we can prepare for human error in the interest of mini-mizing it. For instance, as tempting as it is to fill our facilities with expensive new equipment, doing so will not guarantee that our students will make amazing gains in performance.

The determining factor here is the curriculum. In most institutions the equipment purchase comes first, then the program; in many cases







no program is ever established. We can all agree that for athletes to reach their performance goals, they must be taught to use the new facility and new equipment in a safe, efficient and effective manner. This is why we must decide as a faculty and coaching staff what we need to teach and how we will train our athletes long before we start typing purchase orders. We need to choose an educational program that will provide our children the optimal learning experience. Their chances of success rise astronomically when we become unified in our approach to

guide them in achieving their learning objectives. Right People to the Right Roles"

It's important to consider the indi-vidual needs and interests of students – the elite athlete, the average team member, the student who has no inter-est in weight training at all – so we can deliver the most appropriate experi-ence for each. The BFS Total System is designed to deliver appropriate instruction and practice to all students in a safe, efficient and effective manner.

The **BFS Total System** provides the most solid foundation possible for highly competitive interscholastic programs as well as physical education programs for the student body. Proper instruction of the six core lifts along with a wide range of auxiliary lifts will prepare any student to pursue their sport and athletic performance goals.

#### People

"The single most important busi-ness practice for organizations to increase their odds of success by any measure is to more consistently appoint the

#### THE BFS CORE LIFTS

1 .Box Squat

4. Towel Bench

2. Parallel Squat

5 Hex Bar Deadlift

3. Bench Press

6. Power Clean

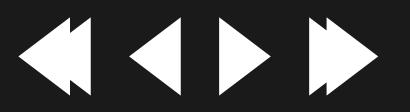
-Tom Olivo

Once the faculty and coaching staff are unified and have agreed on the appropriate curriculum, the next step is to determine who will deliver the instruction. Just as in any field, the quality of coaches and their educa-tional backgrounds vary from person to person. College students majoring in education and exercise science take courses that focus on theory, classroom structure and organization. Although many institutions produce outstanding teachers and coaches, they commonly neglect to address methods of conduct-ing safe, efficient and effective teaching in the weightroom for large numbers of students and athletes.

Over my career of 50 years, I have had the opportunity to visit hundreds of schools and colleges around the country. It disturbs me to see weightrooms in which the lifting instruction is poor, technically incorrect or completely nonexistent. Inadequate supervision leads to injury and the potential for litigation.

Among other requirements, teachers and coaches must be pres-ent in the weight training facility and must provide appropriate instruction in both lifting and spotting skills; three spotters must be present for the squats and bench presses. Consistently correcting the technique of lifts and of





spotting performance will reduce the chance of injury and will increase positive results. For the sake of safety and protection against litigation, all institutions must demonstrate that they have taken every measure to provide a reasonable standard of care for everyone who participates in the weightroom.

Safety concerns have led to the recent mandate by the NCAA requiring that weightrooms in their institutions be supervised by certi-fied coaches. Although there is no specific certification required, the BFS Weightroom Safety Certification is clearly the best because only BFS addresses the class organization and progression of instruction necessary to train large numbers of students and athletes in the weightroom.

Many of the dangerous conditions in exercise facilities are caused by adults in charge who simply do not know what to do. To ensure that our students are taught in the safest and best way, we must hire teachers and coaches who have received additional training and have been certified to safely conduct classes for large groups in the weightroom. If a new hire is not an option, administrators must provide for the professional develop-ment of their existing staff. The best way to ensure they are qualified to deliver safe, efficient and effective programs is through intensive hands-on practical instruction, evaluation of their teaching skills and testing of their knowl-

edge. This in fact describes the curriculum of the BFS Weightroom Safety Certification.

The BFS Total System provides the most solid foundation possible for highly competitive interscholastic programs as well as physical education programs for the student body.

#### **Product**

"Give a man a fish and he will eat for a day. Teach a man to fish and he will eat for a lifetime."

-Unknown

The point here is that to get a fish out of the water and onto our table requires appropriate tools (machines, implements) to do it. Tools are important in just about any endeavor. In interscholastic and intercollegiate sports, athletic performance and physi-cal education, there never seems to be enough money, time or space for the tools of our trade. Therefore, it is imperative that we unify our program and unify our people. Together, we can select products that satisfy program requirements and fulfill learning objectives for the greatest number of students, ath-

letes and stakeholders while best utilizing the limited time and space available.

#### **Ultimate Objectives**

"It is the pervading law of all things organic and inorganic...that form...follows function"

–Horatio

Let's make this simple: Just as the architect creates a physical structure, the administrator is the creative "architect" of the educational structures that will provide for the needs of many stakholders. By following the model of the 3P's we create the structure necessary to support the functions agreed upon by the stake-holders. For example, if an architect designed a stadium solely for football and the stakeholders later decided the structure should also function for baseball and soccer, neither party would achieve their desired objectives.

It's helpful to remember Brian Tracy's 10/90 Rule: The first 10 percent of time that you spend planning and organizing your work before you begin will save you as much as 90 percent of the time in getting the job done once you get started. The 3Ps will serve to guide you through that critical first 10 percent.







You can't break records if you don't keep records!

Athletes can keep track of progress on a phone, tablet or computer.

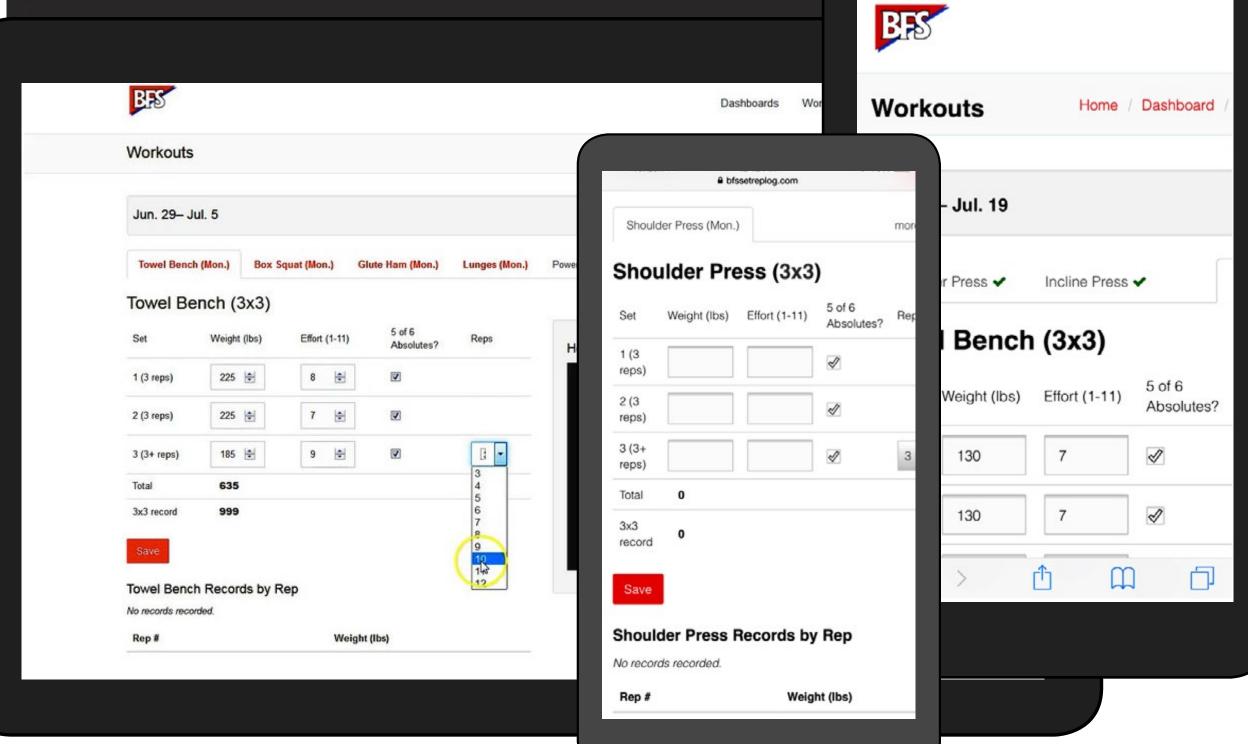
Coaches can keep up with the progress of the whole team.

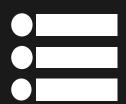
Simply logging in and entering athletes allows for recording sets, reps, weights and tracks record breaking activity every workout!

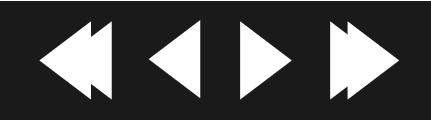
With this web based app every device with a web browser can take advantage the

BFS Total Program and nearly 40 years of championship building protocols that has lead 1,000s of team to winning seasons in nearly every state!

Call BFS To get on board today! 800-628- 9737







## Affordable BXI squat stands can help maximize your work out space

### BXI Squat Stand Only \$495



BXI Farmer's Walk \$195

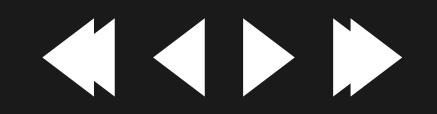
## BXI line has your back Call a Weight Room Specialist 800-628-9737



BXI Double Sided Half Rack Starting Price:

\$1895

BXI Half Racks 3"x 3" 7 Gauge Steel Construction, Includes safties and bar catches, Optional power clean platform available. Free Shipping on orders over \$3,000 Order online at www.biggerfasterstronger.com



## Whats Happeining

# It Is That Time Of Year, Seasons Change, Sports Change, But Your Training? No Way!

This is a time of year many educators and coaches assess their athletic programs and explore ideas on what could make a difference in the future. Few teams make the playoffs, even fewer are division champions and only one is state champion. Is your team in this elite group? How can your school crack the code to improving from year to year - season to season?

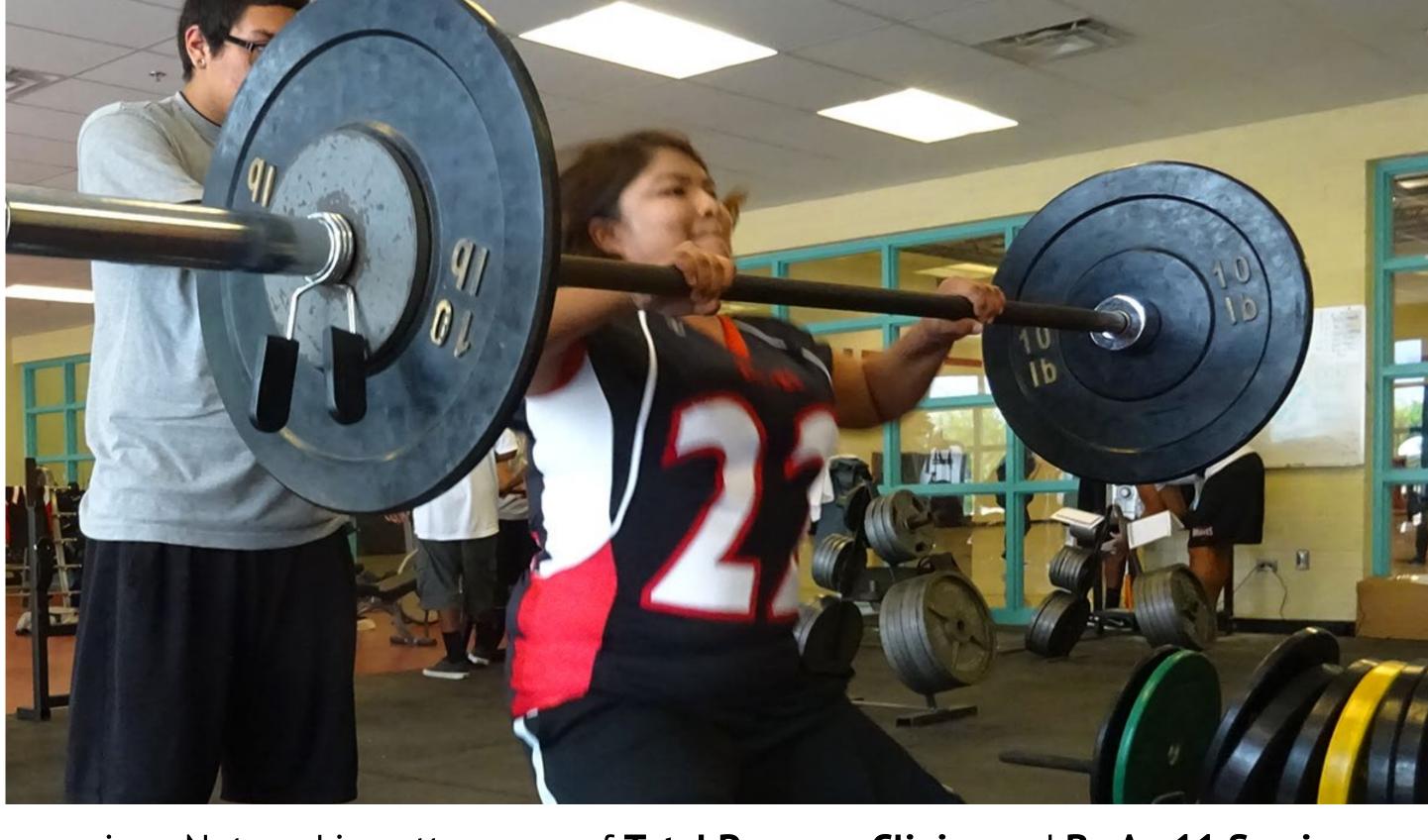
There is a unified training program that spans your sports and seasons! Your students and athletes don't need to have vastly different training regimens when moving into new sports. Rather a consistent program that emphasizes attributes applicable to all sports - speed, strength and explosive movements for leaping, is needed. Bring your athletics and PE together with The Total Program from BFS.

Consistently used by winning and championship

teams for over
40 years BFS
and The Total
Program focuses on core lifts
while leaving
room for sport

specific auxiliary exercises. Not cookie cutter approach but rather a flexible, versatile program built around just six core exercises, while remaining expandable to suit unique situations. Boys and girls from volleyball to football to basketball - all sports - benefit from a consistent, year round training method. With BFS' record breaking results each week the Total Program will inspire your students and athletes to reach even higher!

Read the free BFS Magazine to learn how BFS impacted the San Carlos teams through a series



#### of **Total Program Clinics** and **Be An 11 Seminars**.

Then imagine what a real program, not just a series of workouts, can do for your school. Then take action! Let BFS help you make a difference in all athletics and physical Education in your school!

Reach out to BFS at 800-628-9737 to learn more about how BFS has impacted such diverse districts as the large, urban New York Public Schools and rural New Mexico's Central Consolidated School District.

**Like, Follow and Subscribe** to the CoachBFS YouTube channel to stay informed on a wide variety of program enhancing techniques including stretching for speed







## BFS Now Offers the Most Exciting Professional Development Day of the Year For Your PE and Athletics

Commitment at the District Level Reaps Benefits for Physical Education



Working with New York City Public Schools this year has been an awesome experience for BFS. Our all new Professional Development seminars have really been making an impact across the largest school

district in the country. Many PE teachers and administrators have hailed the day as one of the most fruitful seminars they have ever attended.

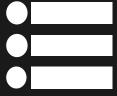
Learning about effective and safe weight room protocols has really opened up these teachers to the ease of incorporating strength training into their Physical Education environment. By combining a dynamic presentation along with actual hands on training every educator in attendance was kept involved and excited to learn more.

BFS provides the path to ongoing education and Weight Room Strenth and Safety Certification (WRSC) by awarding teachers in attendance with credit toward completing the WRSC course. Find out how much BFS can save your school and district with Professional Development that you can use right away! Call 800-628-9737.





**Like, Follow and Subscribe** to the CoachBFS YouTube channel to stay informed on a wide variety of program enhancing techniques including stretching for speed





### Total Program Clinics & Championship Camps

## Start Your Championship Journey With BFS!

#### All Pricing Includes Travel, Air Fare and Expenses



Be an 11 Seminar · 2 Day Total Program Clinic · In-Service Weight Room Safety Certification

#### Pricing and Savings

RETAIL: 50 STUDENTS & 5 COACHES	PACK- AGE
BE AN 11 \$2990	\$1495
2 DAY TPC \$3990	\$3990
IN-SERVICE \$3195 WRSC	\$1495
IMPLEMENTA- \$3500 TION PACK- AGE	\$0

TOTAL: \$13,675 | \$6980

#### Save Over \$6695!

WRSC: \$299 per coach over 5 Camp: \$40 per student over 50

#### Implementation package

Valued at over \$3,500 the implementation package contains equipment, instructional materials and ongoing support So you can take charge of your program immediately after your Championship Camp! Includes:

**Complete Weight Room Evaluation, 2D** weight room layout design, Set Rep Logs, Youth Training Bar Package, Total Program DVDs, Be An 11 books, camp t-shirts, 4 month magazine subscription for all athletes and students, WRSC Support for certified coaches and more!

#### Experience, Tradition, and Value:

The BFS Championship Camp delivers a winning culture to your school - in athletics and in life!



BFS Championship Camp 2 Days, 50 Athletes \$5485

Product # 800B Be an 11 Seminar · 2 Day Total Program Clinic

#### **Pricing and Savings**

RETAIL PRICE:	50 STU- DENTS	PACK- AGE
BE AN 11 SEMINAR	\$2990	\$1495
2 DAY TPC	\$3990	\$3990
IMPLEMENTA- S TION PACK- AGE	\$2500	\$0
TOTAL:	<del>\$9480</del>	\$5485
<b>a a a</b>	OFI	

#### Save Over \$3995!

Camp: \$40 per student over 50

Implementation package valued at over \$2,500. Includes Set Rep Logs, Weight **Room Evaluation, Total Program DVDs,** Be An 11 books, camp t-shirts and much more!



Certification 10 Coaches Minimum

#### **Pricing and Savings**

Be An 11, Coaches WRSC 50 Athletes & 5 Coaches:

\$4735 Product # 800G

RETAIL: 50 STU- DENTS & 5 COACHES		PACKAGE	
	BE AN 11 SEMINAR	\$2990	\$2990
	IN-SERVICE WRSC	\$3195	\$1745
	IMPLEMEN- TATION PACKAGE	\$2500	\$0
	TOTAL:	<del>\$8685</del>	\$4735

#### Save Over \$3950!

Be An 11: \$30 Per student over 50 WRSC: \$349 per coach over 5

Be An 11, Coaches WRSC 1 Day Total Program Clinic, 50 Athletes & 5 Coaches: \$6480 Product # 800C

#### Pricing and Savings

	RETAIL: 50 STUDENTS & 5 COACHES	PACK- AGE
	BE AN 11 \$2990 SEMINAR	\$1495
,	1 DAY TPC \$3490	\$3490
'	IN-SERVICE \$3195 CERT.	\$1495
,	IMPLEMEN- \$3000 TATION PACKAGE	\$0
,	TOTAL: \$12,675	\$6480

#### **Save Over \$6195!**

Be An 11: \$20 per student over 50 1 Day Clinic: \$20 per student over 50 WRSC: \$299 per coach over 5

Implementation package valued at over \$3,000. Includes Set Rep Logs, equipment, Total Program DVDs, Be An 11 books, WRSC Support and much more!



Coaches Weight Room Safety

#### Pricina

110119
10 COACHES
10 COACHES X \$399 - \$3990 - 1200 DEPOSIT
<b>Total: \$5190</b> WRSC: \$399 per coach over 10
Implementation package worth ove \$2,300.

\$5190 Product # 800H



#### Product # 800D

Pricing and Savings		
RETAIL PRICE:	50 STU- DENTS	PACK- AGE
BE AN 11 SEMI- NAR	\$2990	\$1495
1 DAY TPC	\$3490	\$3490
IMPLEMENTA- TION PACKAGE	\$2500	<b>\$0</b>
TOTAL	<del>\$8980</del>	\$4985

#### Save Over \$3995

books, and much more!

**Product # 800** 

Be An 11: \$20 per student over 1 Day Clinic: \$20 per student

over 50 Implementation package valued at over \$2,500. Includes Set Rep Logs, equip-

2 Day Total Program Clinic, **■**50 Athletes \$3990

ment, Total Program DVDs, Be An 11

2 Day Clinic: \$30 per student over 50 Implementation package worth over

#### 2 Day Total Program Clinic, Coaches WRSC 50 Athletes & 5 Coaches:

#### Pricing and Savings

\$5735 Product # 800E

TION PACKAGE	\$2500	\$0
IMPLEMENTA-		
IN-SERVICE CERT.	\$3195	\$1745
2 DAY TPC	\$3990	\$3990
RETAIL PRICE: 50	0 STU- DENTS	PACK- AGE

#### Save Over \$3,950!

port and much more!

2 Day Clinic: \$30 per student over 50 WRSC: \$349 per coach over 5 Implementation package valued at over \$2,500. Includes Set Rep Logs, equip-

ment, Total Program DVDs, WRSC Sup-

1 Day Total Program Clinic.

50 Athletes \$3490 Product # 800J

1 Day Clinic: \$30 per student over 50 Implementation package worth over

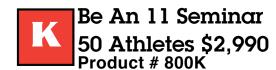


#### **Pricing and Savings**

		_
RETAI	L PRICE	PACK- AGE
1 DAY TPC	\$3490	\$3490
IN-SERVICE CERT.	\$3195	\$1745
IMPLEMENTA- TION PACK- AGE	\$2500	\$0
TOTAL:	<del>\$9185</del>	\$5235

#### Save Over \$3,950!

1 Day Clinic: \$30 per student over 50 WRSC: \$349 per coach over 5 Implementation package valued at over \$2,500. Includes Set Rep Logs, equipment, Total Program DVDs, WRSC Support and much more!



Be An 11: \$30 per student over 50 Implementation package worth over \$1,000.

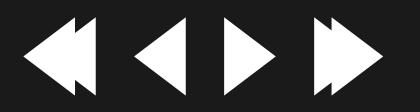
Package Details and Information: All camps and clinics offered come with implementation packages containing instructional materials, many worth more than \$3,000. For complete details on these packages and what you can expect from your camp, clinic or seminar visit www.biggerfasterstronger.com/camps. Here you will also find helpful hints and instructions on what you can do to prepare for your BFS clinics. All dates must be booked 30 days prior to clinic date. Book early to lock in your preferred dates.

## **Learn More about the Total Program**

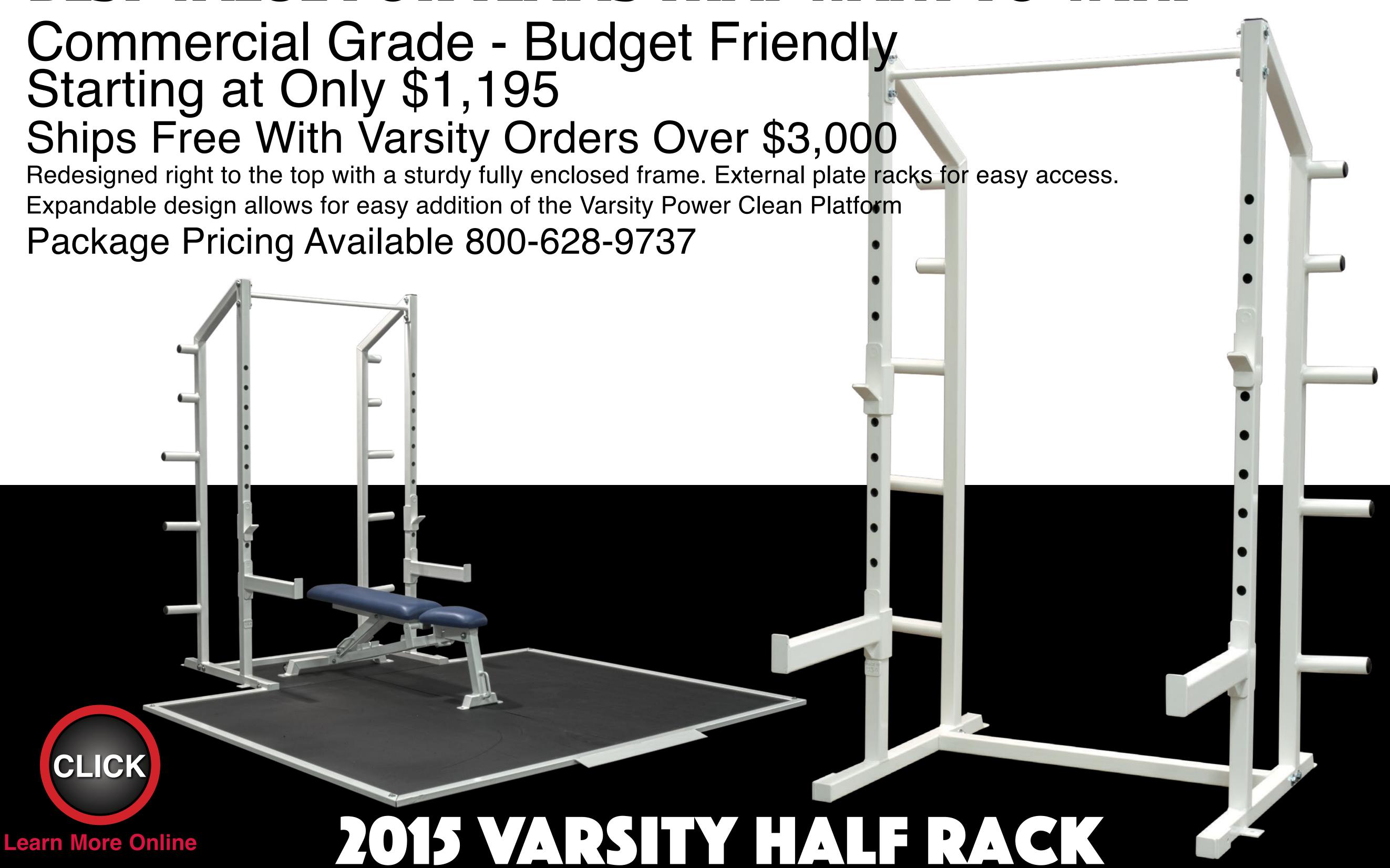
### Combine your clinics and save! Call 800-628-9737 to learn about bringing BFS to your school





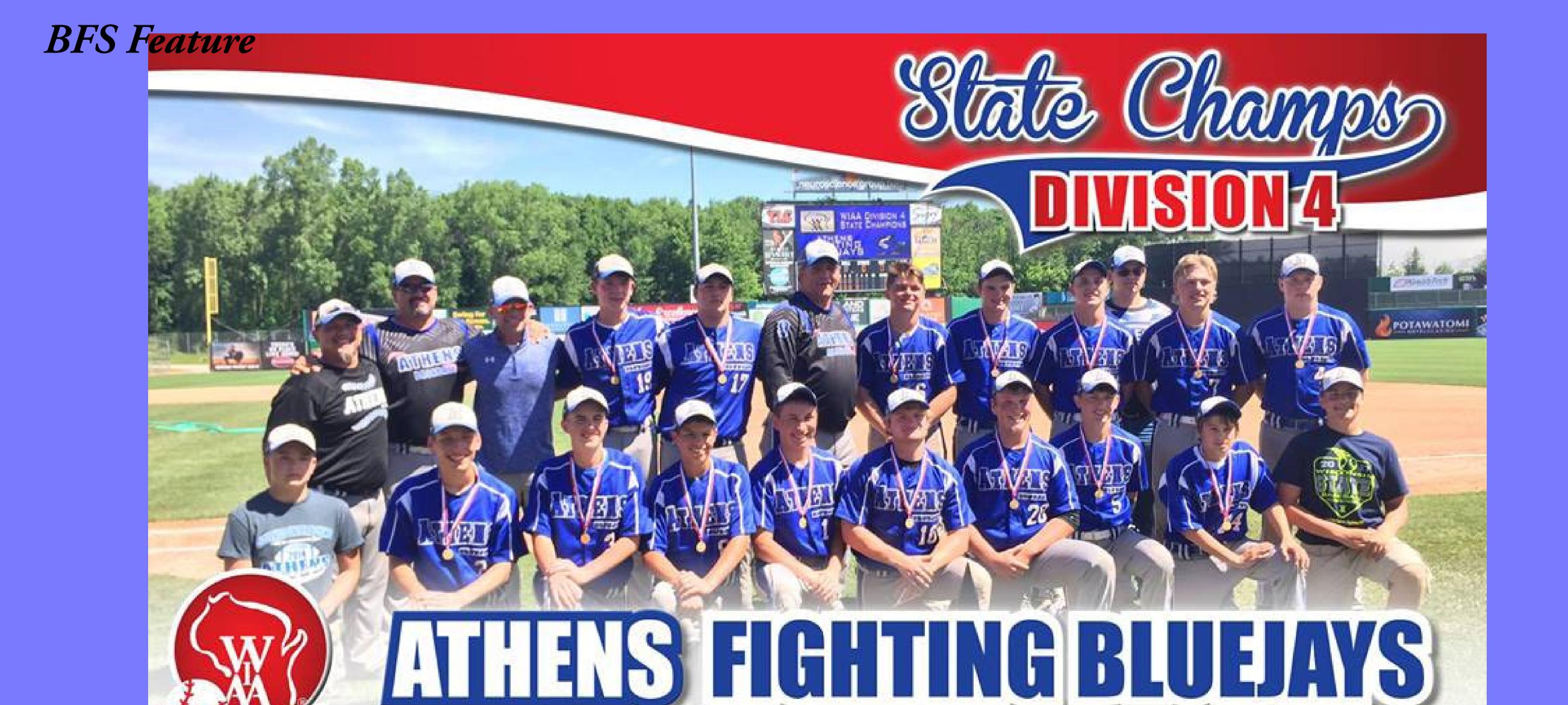


## BEST VALUE FOR TEAMS THAT WANT TO WIN!









# Dlaying Up to the Competition at Athens High

At smaller schools, coaches and other faculty members often need to wear a lot of hats to get done all the things that need doing. The result is a considerable amount of work and a tremendous amount of responsibility -- just ask Athen's High Craig Diedrich.

Diedrich has accepted the challenge of being a middle school science teacher, coaching football and softball, and head supervisor of the strength and conditioning program of this small school in the rural community of Athens, Wisconsin. Such dedication has rubbed off on the students.



#### BFS Feature

A public school serving grades 9 through 12, Athens High School serves 182 students and has a 98 percent graduation rate; it is the only high school in the Athens School District. The fall sports are cross-country, football, and volleyball; the winter sports are basketball and wrestling; and the sprint sports are track and field, softball, and baseball.

"Our football players are our basketball players, who in turn are out baseball players, and so on."

**Athen's High Craig Diedrich** 

Diedrich and the other members of the coaching staff at Athens encourage their students to participate in

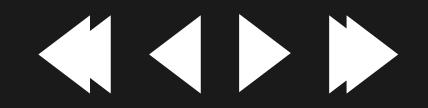
multiple sports. He says that not only does he want these young men and women to enjoy the high school experience, but joining outside sports programs hurt the entire athletic program. "Our football players are our basketball players, who in turn are out baseball players, and so on." Although there are some parents who believe that having their sons and daugh-

ters focus on a single sport year-round may help their odds of earning a college scholarship, Diedrich says scholarships "are few and far between," and often these scholarships are for D3 and D3 schools. He says most parents would be better off putting the money they would have spent on outside sports teams and use it to pay college tuition!

About 10 years ago Athens High School brought out out BFS clinician (and now president) John Rowbotham for a clinic. Diedrich says most of the coaches immediately bought into the idea of having a unified strength and conditioning program, and to help make it happen he opens the weightroom at 6:15 am during school days for a one-hour session. For those who cannot







#### BFS Feature







make this Brawn at Dawn program, there are many other times available for them to lift under the supervision of a coach. And to give his program a jump start, this spring Diedrich brought out **BFS clinician Dennis Moon** for a refresher clinic, which he says helped give the newer coaching staff a better understanding of the BFS program.

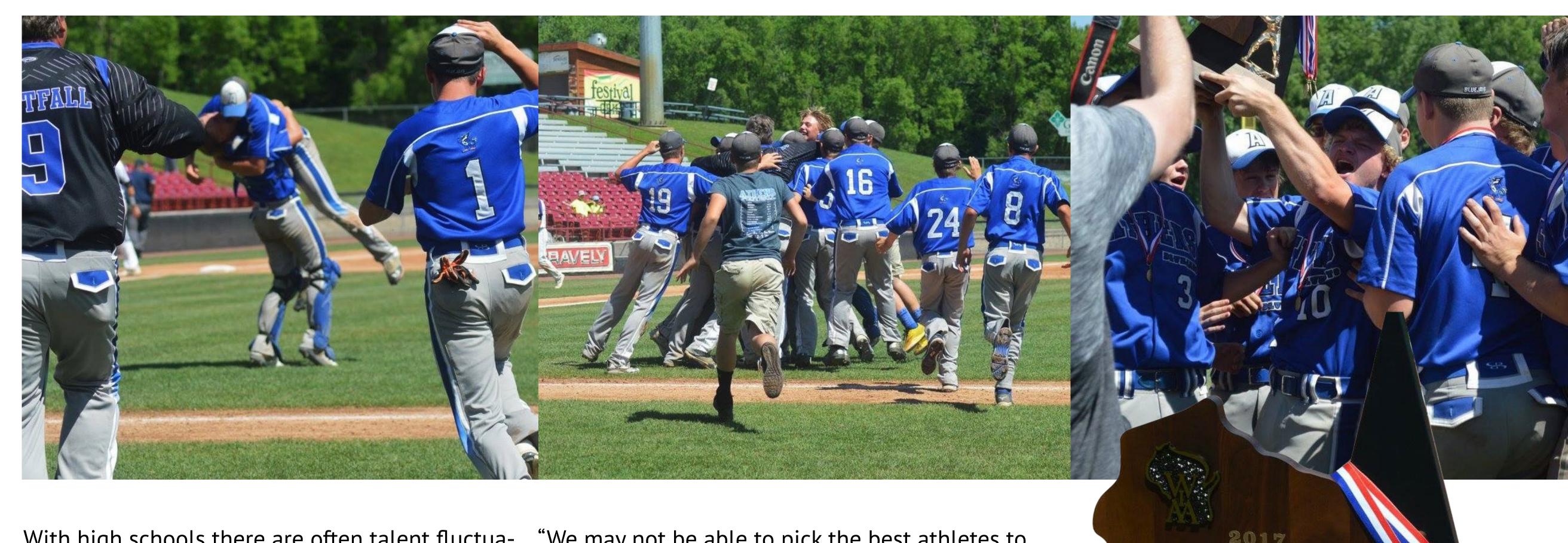
Diedrich says that myths about strength training and softball have for the most part disappeared, but that "we still with an occasional parents saying if you lift heavy you're going to

get slow," but this should not be a concern with BFS. "With BFS, the speed and agility training that is critical to an athlete are part of the program." He adds that initially there was some resistance to have athletes lift heavy close to a competition, but this issue is no longer a concern. "Our football team even lifts on the morning of game day – their bodies are conditioned and it only takes them a few hours to recover." As for testing for sports, Diedrich believes that the best tests – and training exercises – for sports at the BFS core lifts. Squats, cleans, bench presses.





#### BFS Feature



With high schools there are often talent fluctuations, and Athens is specially challenged as they are in the bottom third of their conference in terms of student enrollment. Nevertheless, since starting BFS a decade ago Athens has produced many good teams. Examples include a baseball team that won the state champion in 2017, a football team that won six conference championships and a softball team that has eight conference titles and 5 sectional appearances. Last year their volleyball team earned a spot in their first state tournament in 35 years, and six wresters made it to the state tournament.

"We may not be able to pick the best athletes to come into our athletic program, but weight training is one of the things we have power over and we maximize that. We also come for the perspective that if you work hard you're not only helping your team but helping your teammates. We want to give a positive experience and we what to produce quality members of society when they get out of Athens High School."



BASEBALL

# POWER + SPEED The Formula for Success Develop Powerful LEGS and HIPS



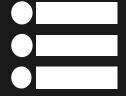


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Overspeed \$109.95

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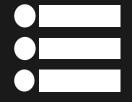


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Comfortable, yet Durable Nylon

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Order your speed equipment here!







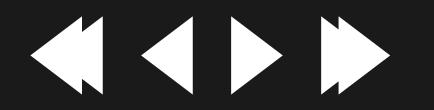
# Why BFS Why Athletes Need Leg Curls

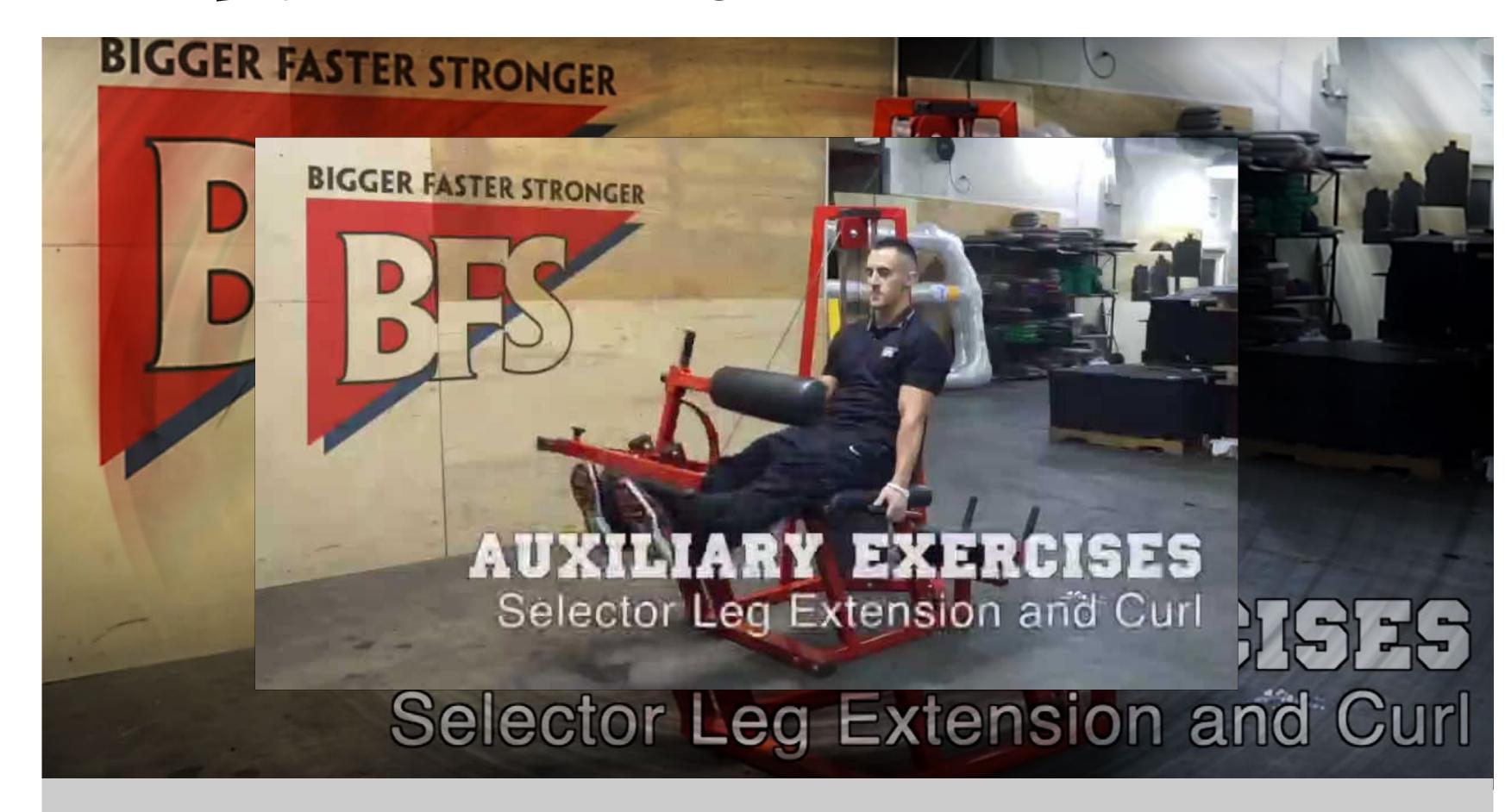
The BFS program emphasizes free weights over machines, but there are some exercises performed with machines that are especially valuable for athletic and physical fitness programs. One such exercise that BFS has been promoting for nearly four decades is the leg curl.

Leg curl machines are a key fixture in commercial gyms, and they are one of the first machines purchased for high school and college weightrooms. Its popularity is such that BFS offers both an economical plate-loaded leg curl machine, along with a selectorized leg curl machines, and even one that combines both exercises in one unit for those gyms where space is especially limited.

Leg curls are one of best exercises to strengthen the hamstrings, but to fully appreciate their value, you need a flash course in biomechanics. The hamstrings are not a single muscle but several that collectively perform the following functions: flex the knee, extend the hips, and rotate the foot inward or outward. Leg curls focus on the muscles that flex the knee; in contrast, a straight leg deadlift focuses on the muscles that extend the hip. The glute-ham raise,







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a BFS auxiliary exercise that is performed on a glute-ham developer, works both hip flexion and knee flexion.

Whereas the quads are involved in generating force while jumping and propel the body at the start of a sprint, the hamstrings are most strongly involved in deceleration. Have doubts? Find a steep hill about 30 yards long, walk up it, and run down; repeat about 8-10 times. The next day you might find it difficult to sit as your hamstrings

will be so sore. Likewise, if you were to sprint up that same hill and walk down it 8-10 times, the next day your quads will probably be sore.

During sprinting, the quads will be used more at the start and the hamstrings will start kicking in when the body transitions to the upright sprinting posture.

The BXI Dog Sled has reversible vertical handles, and the BFS Heavy Duty Push/Pull Sled has verti-

cal and horizontal handles. The lower the grip on the handles, the greater the involvement of the quads and less involvement of the hamstrings. This is a valuable benefit for those recovering from a hamstring injury.

If a sprinter pulls a hamstring, because there is little eccentric overload in pushing a sled, after the initial stages of rehab a sprinter could start walking, running, and then sprinting with a sled. BFS Editor Kim Goss worked with a high school sprinter who suffered a Grade 1 level hamstring pull, and at the time the sports medicine physician predicted it might take her up to five months to completely recover. Within six weeks when was breaking personal records in the 100m and 200m sprinters.

The two most popular types of leg curl machines found in most commercial gyms and strength and conditioning facilities are prone and seated. It's been said that the seated leg curl machine was developed for those with lower back issues that made lying face down uncomfortable, or for women who are pregnant and as such have to avoid lying face down.

The problem with seated leg curl machines is that we've found they tend to cause hyperextension of the knee, especially when performed with heavy weights. BFS has a line of machines for kids that seated leg curl (in combination with a leg extension), but it's a hydraulic unit so that re-









BFS offers the <u>selector stack models</u> of the leg curl in a pair of styles. One is a dedicated, single exercise leg curl machine that and the other is a dual pupose machine that cleverly combines a leg extension movement to the unit.

sistance is provided only when leg muscle shortens so that they are less risk of hyperextension. However, because running involves strong eccentric (i.e., muscle lengthening) contractions, physically mature athletes should focus on leg curls that provide resistance for both eccentric and concentric contractions to ensure full development.

Depending upon your budget, BFS offers the economical plate-loaded prone leg curl along with a selectorized version. For those facilities tight on space, we have a combination leg extension/leg curl machine that enables the user to change from a seated leg extension to a prone curl in a matter of seconds by simple folding down a backrest.

The two types of rotation of the foot are lateral rotation, turning the feet away from the body, and medial rotation, turning the feet inward. If an athlete presents a muscle imbalance that causes them the walk with their knees pointed excessively inward, they should perform leg curls with the feet turned outward. Likewise, if they walk with their feet turned excessively outward, they





Hydraulic units are a fantastic way to get resistance training without fear of injury. great for beginners and for rehab.

would perform leg curls with their feet turned inward. If there is no imbalance, the feet should remain in a neutral position. Although the leg curl seems like a simple movement, there are ways to make it more challenge, thus creating a higher level of muscle tension on the hamstrings.

Many strength coaches believe it's best to start the exercise with your toes pulled towards the body as you lift the weight and then point them away from the body as you lower the weight. Here's the thinking. Because the gastrocnemius (upper calf muscle) assists the hamstring when the toes are pulled back, you can lift more weight, thus increasing muscle tension. And because you can lower more weight than you can lift, you would point the toes away from you to isolate the hamstrings and, again, increase the muscle tension. And to brutally blast the hamstrings, try raising the weight with both legs and lowering it with one leg; perform the same reps with both legs.

Although the hamstrings do contain slow twitch muscle fibers that response better to higher repetitions, athletes should emphasize lower reps so they can use heavier weights. This is because a high level of muscle tension is needed to effectively deal with sudden stops and changes in direction

when athletes move at high speeds. In fact, because an estimated 70 percent of ACL injuries are non-contact, it makes sense that the hamstrings should be trained with workouts that create a high level of muscle tension to simulate the actions that occur in athletes.

The value of working the hamstrings at a high level of muscle tension was demonstrated in a

study on Danish soccer players published in 2012 in the Journal of Physiotherapy. The study involved 942 athletes, divided into a group that did a hamstring exercise for 10 weeks and a control group that did not perform the exercise. At the end of the season, the group that did not perform the exercise suffered 52 injuries whereas the group that performed the exercise only reported 15 injuries!

BFS offers three types of prone leg curl machine. The first is a plate-loaded version, which is ideal for programs on a tight budget because it does not contain a weight stack. Then we have two selectorized units, one that has the user performing the exercise as a stand-alone unit and one that enables the user to perform a quadriceps exercise. This combination machine has an ingenious design that enables you to convert the leg curl function into a leg extension machine in a manner of seconds – such a feature makes it perfect for circuit training. This unit, called the "Selector – Leg Curl and Extension," is also the answer for facilities that are short on space.

With over 40 years in the business, BFS has found that free weights should be the focus of any workout designed to improve physical and athletic fitness. However, we've also found that there are some machines that should be added to your program because of their effect on improving athletic performance. The leg curl is one such exercise.







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