



YANKEE INNOVATIONS

The Secrets of Yankee Farm Team Development

by *E. J. Fagan*

Evaluating, selecting, and training a young kid to be a Major League Baseball player has been described as both an art and a science. The divide between art and science—qualitative and quantitative analysis—has created an intellectual debate within the baseball community about how best to handle a farm system. Some teams—like the Oakland Athletics and Boston Red Sox—have taken a decidedly scientific approach to their handling of amateur and minor league players. Others, like the Atlanta Braves and more recently the Tampa Bay Rays, have mastered the art of scouting and coaching prospects on an individual level.

Brian Cashman's Yankee organization has blended the two concepts to create one of the best farm systems in baseball. Before the 2005 season, Cashman made the strategic decision, as part of his hard-won autonomy from George Steinbrenner as the Yankee's general manager, to shift from a free agent-centered strategy, where prospects were primarily used as trading chips to acquire veterans, to a strategy that also incorporated home-grown players. He realized that the Yankee model of signing expensive free agents whenever there was a need would not enable them to vault back to dynasty-caliber baseball.

Cashman's Yankee administration has been characterized by four traits: aggressiveness, innovation, patience, and discipline. He has given his staff a full mandate to be bold, and the necessary bank account to do so. The Yankee farm system was among the most ineffective and barren systems in the game prior to the revamp in 2005, but today it is a veritable powerhouse. *Baseball America* ranked their system 24th out of 30 in 2004; it had jumped to 5th by 2008.¹ They're doing something right.

THE ENGINEER

When Brian Cashman decided to make minor league development an institutional priority in 2005, he turned to Damon Oppenheimer.² Oppenheimer, the Yankees newly-promoted director of player development, had a difficult task. The Yankees had failed to develop a single major league regular from the amateur draft since Jorge Posada, Mariano Rivera, and Derek Jeter, and what few prizes the draft had yielded were immediately traded away. The Yankees did have some success with international signings, picking up Alfonso Soriano, Chien-Ming Wang, Robinson Cano, and Melky Cabrera. But the prime source of talent that had brought the Yankees success at the end of the '90s, internal development, was no longer delivering, and Oppenheimer's job was to find a way to fix that.

Oppenheimer arrived with a resume well-suited for the job. He was a protégé of Gene Michael, architect of the 1990s Yankee dynasty. Oppenheimer started his stint as a scout for the San Diego Padres following an unremarkable career in NCAA baseball. He signed on as a cross-checker



Jorge Posada, Mariano Rivera, and Derek Jeter are the last truly home-grown Yankees to make significant contributions to the team's success.

for the Yankees in 1994, and quickly made his way to the major league advanced scouting team, where he worked with Michael. Renowned for his good judgment and attention to detail when scouting young players, “Stick” Michael also had Yankee longevity, having served in pinstripes as player, coach, manager, scout, general manager, and advisor over the decades. Oppenheimer worked his way through the often-treacherous politics of George Steinbrenner's Tampa operation in the '90s. He displayed a hybrid style of scouting, using knowledge gleaned from Michael, combined with “Moneyball” techniques newly popular in front offices.

Drawing on that background, Oppenheimer was ready to dramatically change the organization's approach once elevated to the position of director of player development. The Yankees had previously kept their scouting department on a tight budget to save money for the major league team, but Cashman gave Oppenheimer a virtual blank check for the draft, along with a unique directive.

AGGRESSION

Most major league teams are risk averse at the draft. They run to safety, not wanting to waste their limited amateur budget on a player who is likely to wash out or go elsewhere. The Yankees were not interested in searching just for “safe” players, but instead decided to use their limitless pocketbook to take as many risks as possible. Teams will often pass on drafting a player they believe will cost too much to sign, might opt for college, or whose health is considered a risk. These players are first-round caliber talent, but are available in the later rounds for the same price. Paying first-round bonuses to later-round picks is called going “over-slot.”

Oppenheimer made his first big over-slot move in the eighth round of the 2005 draft when he picked and signed Austin Jackson. Jackson, a premier athlete, was so far off the radar that not one of the other 29 teams considered signing him. Baseball was not his primary sport—he had a scholarship to play point guard for Georgia Tech—so other teams did not even give him a look. However, Oppenheimer knew him as well as any prospect in the draft—the Yankees had been scouting Jackson since he was 11 years old. Oppenheimer lured his man away from basketball with an \$800,000 signing bonus—a record for an eighth-round draft pick, but modest for a first-round talent. Jackson has since become the Yankees top position prospect, and may very well debut for the major league team this coming summer. Meanwhile, the Yankees have continued that aggressive approach with the checkbook, spending \$14.8 million in the draft over the past two years, the highest of any major league team.

Many players who fall in the draft, fall due to injury. Agents often conceal the extent of injuries before teams shell

out big money; fear of being burned causes teams to shy away from prospects they suspect may be hurt. But agents cannot plausibly conceal a pitcher who needs major shoulder or elbow surgery. A pitcher whose elbow ligament is degraded to the point of requiring Tommy John surgery is radioactive at the draft; agents do not want these players selected because the signing bonus will be reduced, and teams don't want to risk money on a player who will have to sit on the shelf for the better part of two years in rehab. This doesn't deter the Yankees.

Andrew Brackman could have been the first overall pick in the 2007 draft. At 6'10", he literally towered over the competition. Brackman would often hit 100 mph with his fastball, and supplemented it with a plus-plus knuckle-curve. His mechanics were unusually good for a young player of his size, and Brackman proved to be more of a pure athlete than your typical lanky big man. He seemed like he should be the perfect draft pick, and would never fall to the Yankees at the 30th overall pick. The problem? Entering his junior year, Brackman's velocity dropped to the low-90s, he lost his control, and was passed over by his college coach in big games. The NCAA's scariest threat was no longer effective. Scouts figured, correctly, that his elbow had failed him and he would need Tommy John surgery.

The Yankees saw this as an opportunity to draft talent that they would never have a shot at otherwise, perennially picking as they do so late in the first round. They not only drafted Brackman, but also gave him a \$3.35 million signing bonus and a major league deal. He immediately underwent Tommy John surgery, and missed 14 months of baseball.³ Will the Yankees be vindicated by receiving a blue-chip, ace-caliber stud? No one knows at this point. But no one will ever say that they did not try. They shipped Brackman to the Hawaiian Winter League, the same league where Joba Chamberlain spent time in 2006, and his recovery appears on track with 36 strikeouts and 25 walks in 34 innings pitched.

INNOVATION

Major league teams do not know how to develop relief pitchers out of the minor leagues. The vast majority of successful relief pitchers currently in the bigs are converted starters. Often, teams will take a starter who either has endurance problems or is unable to develop a third pitch and use him in short bursts. What has largely not worked is taking pitchers who were relievers in college and translating that success to the majors. There's also been little success transitioning from starter to reliever early in most pitchers' careers. For example,



At 6'10" Andrew Brackman was a two-sport star in college and was the Yankees' first-round pick in 2007.

the Boston Red Sox failed to find a way for Craig Hansen to excel in their major league bullpen despite enormous success in the minors and college. Hansen's problems are by no means unique—the great Atlanta Braves were unable to keep Joey Devine in the show.

Starting in 2005, the Yankees created an experimental new pitching regimen to attack the problem. While other teams had pushed their relievers to pitch multiple innings in the minors, no team took it to the systematic level the Yankees did. They scheduled their relief pitchers just like starters. Every third day, a reliever designated as a prospect would throw two innings. Sometimes, he would even stay in for three. The Yankees refused to allow their pitchers to throw just one inning at a time, regardless of game situation.

To illustrate, we can compare two rising relief prospects. The Colorado Rockies drafted college closer Casey Weathers with the eighth overall pick of the 2007 draft. Weathers possesses typical closer stuff: a plus breaking ball and live fastball. He struggles with control, and by all accounts needs some development time before he is MLB-ready. The Rockies pitched him in 44 games for Double A Tulsa last year. He pitched 44.1 innings, and finished 20 games, serving as the team's closer. At a time when Weathers most needs experience

to try new things, the Rockies are allowing him to pitch an inning every other day.

The Yankees did not treat their own star college closer, Mark Melancon, this way. The Yankees paid Melancon \$600,000 to leave college following his ninth-round selection in the 2006 draft (another record). Oppenheimer knew he would probably require elbow surgery, which was confirmed when Melancon's elbow blew out in winter ball shortly after signing. He rehabbed for a little over a year, and emerged in spring training before the 2008 season as healthy as ever.

Most teams would be careful with a repaired arm of his caliber, allowing him to adjust back to professional baseball with a cautious few innings. Instead, the Yankees allowed him to pitch a grand total of 94.1 innings in 44 games (2.14 per game) over three minor league levels. He finished the year dominating Triple A, and would have been considered for a major league call-up had the Yankees been in contention in September. The Yankees decision to pitch Melancon for that many innings in relief, so soon after surgery, was unprecedented.

Melancon was not alone among Yankee experiments: David Robertson pitched 2.89 innings per game in 2007 and 1.78 per game in 2008; Edwar Ramirez pitched 1.66 per game in 2007; Anthony Claggett, one of the prizes of the Gary Sheffield trade, pitched 2.05 per game. The Yankees are pushing their relief pitchers to throw longer and longer outings.

Why do they do this? There are two definite reasons, and there may be a third. The definite reasons are time and technique. Relief pitchers are often pushed faster than their starting brothers through the minor leagues because they tend to dominate their opposition. The constant temptation to push them closer to the major league team forces the organization's hand. Starting pitchers generally pitch 100 or more innings at a level before being promoted, whereas relief pitchers are often promoted after 30 or fewer. Relievers are often not given development time to learn their craft in less competitive environments the way starters are. This is why so many relievers fail, unless they are converted late in their minor league careers. The Yankees solve these problems by splitting the difference—stretching relievers out with regular periods of rest like starters, but pitching them more often, and in the middle of games, like major league relievers. By throwing not just three outs at a time and facing most of the opposing lineup, they gain the seasoning and control of all their pitches the way a starter would, while still learning the mentality and routine of relief pitching.

The third reason is a little more cryptic. No team has ever developed a large number of relievers using this pattern. Relief pitchers are trained to throw one inning, staying in for a second every so often. What if they were trained to throw more? They might be stronger on consecutive days of one



David Robertson is one of a new breed of pitchers coming out of the Yankees' systematic relief corps training methods.

inning each, but they also might be able to throw two or three when called upon. That is the potential chest of gold that the Yankees may be trying to unlock with the new system. Mark Melancon has the stuff to be an amazing closer. Some star closers—like Billy Wagner, Trevor Hoffman, and Jonathan Papelbon—dominate for 60–65 one-inning appearances a year. Mariano Rivera is one of the rare guys who can be called upon for two innings of work, but the Yankees hold their breath when he does. What if the Yankees had a legion of relief pitchers who could pitch two innings regularly? They would hold an enormous competitive advantage over their opponents, and would be able to customize their 25-man roster in ways that no American League team is currently able to. Damon Oppenheimer is taking a risk by trying a new strategy, but the pay-off seems to be coming. David Robertson gave the Yankees a considerable amount of innings per appearance in 2008, even if he had some trouble adjusting to major league hitters.

PATIENCE

There are two different types of minor league baseball players: the prospects and the euphemistically named “organizational players.” Prospects play, and are promoted by a team, because they may one day become useful major league

players. Each of an organization’s farm teams probably has four or five prospects. The other 20 or so players on a roster are just organizational players—barring a rash of injuries at the major league level, those guys will likely never play even one inning in the show.

Many players are drafted and considered prospects. Most of them struggle, lose their status as prospects, and eventually quit for another line of work. However, some of these guys stick around through long years of adversity. Teams have a finite amount of coaching resources to invest in a large pool of players, so most teams give up on those who don’t show success over a long period of time, redirecting resources toward better bets. The Yankees have an unusually large pool of resources, though, and can afford to keep taking fliers on borderline prospects.

The best recent example of this is Phil Coke. Coke, a lefty pitcher, wasn’t much of a prospect as little as a year ago. I ranked him the 42nd best prospect in the organization, which was pretty much dead last among players whom I gave that label. I was dead wrong. A variety of reasons—poor control, injury, a lack of stuff, and a late start—saw Coke languish in A-ball for *five years* after being drafted out of college in 2001. He was frequently bumped from the rotation by



The long-term investment in Phil Coke's success has paid dividends.

hotter prospects. But through hard work and good coaching, Coke began to hit the mid-90s. His newfound velocity and improved change-up carried him all the way to the major leagues in 2008. While it took Coke five years to get out of Single A, it took him just a few months to ascend from Double A to the majors. Most teams would have given up on Coke a long time ago, dooming him to organizational player status.

DISCIPLINE

The downside to aggression and innovation is that a coaching staff can sometimes push too hard. To compensate for this, the Yankees have developed a rigid set of organizational rules to guide their coaching staff at every level. These rules control the way Pitching Coordinator Nardi Contreras teaches curveballs instead of sliders to right-handed pitchers. The rules determine how many change-ups Phil Hughes throws and the innings cap on Joba Chamberlain. Contreras, a former major league pitching coach with the Chicago White Sox, came to the Yankees in 2005 with Cashman's consolidation of power. Not coincidentally, while Contreras's



Former big league pitching coach Nardi Contreras, now the Yankees' organization-wide pitching guru, formulated the well-publicized "Joba Rules."

influence rose, that of Billy Connors, George Steinbrenner's hand-picked "pitching guru," waned.⁴

Joba's career is an interesting example of one shaped by organizational rules. The Yankees have a rule that starting pitchers must pitch 40 innings before earning a promotion to the next level, barring a pressing need arising from injury. Chamberlain debuted for High A Tampa in 2007, and quickly proved that he didn't belong there. He was barely even challenged by A-ball hitters, posting a 2.03 ERA and 51 strikeouts in 40 innings. Sure enough, he found his way to Double A as soon as he hit the magic 40 innings. He did the same routine in Double A, but had to wait all the way until he pitched 40.1 innings to earn his promotion to Triple A, where he began his bullpen conversion. The rest is history.

Why such rigid rules? The Yankees, scientists as much as artists, do not believe that they can make an informed decision about a pitcher in fewer than 40 innings. A smaller sample size is not large enough for an objective evaluation. They put innings caps on pitchers because studies show that a pitcher whose innings total jumps more than 30 innings from one season to the next puts himself at high risk for arm injuries. They teach all right-handed pitchers curveballs because they feel that they will be able to throw them for strikes more often than sliders and splitters. They are not simply trying new things, but rather systematically using scientific methods to figure out the best way to take the risks that they do, and to do it in the most efficient way possible.

In the end, the organization is just as concerned about risk as other clubs, but they manage it better. Other clubs become risk averse due to budget concerns, institutional expectations, and a lack of organizational focus. The Yankees refuse to simply take the "safe bet," preferring to risk failure in order to potentially score big. Their scientific approach to seasoning prospects, developing talent, and helping them avoid injury prevents their boldness from becoming recklessness. This ruthless efficiency may be what brings a championship back to the Bronx. **MSP**

ENDNOTES

¹ John Harper, "Scoutmaster in the Bronx: Oppenheimer Finds Young Talent," *NY Daily News*, February 24, 2008.

² Ibid.

³ George King, "Yanks Top Pick to Have Surgery," *New York Post*, August 27, 2007.

⁴ Tyler Kepner, "Torre Puts His Trust in Tampa. No, Really, He Does," *NY Times* "Bats" Blog, August 25, 2007.

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