



Pacific water polo coach James Graham explains how he uses data to improve his players' performances. [ROGER PHILLIPS/THE RECORD]

# Teams thrive by crunching the numbers



University of the Pacific men's water polo coach James Graham shouts instructions to his team during a game. [CLIFFORD OTO/RECORD FILE 2013]



Pacific's Kyra Christmas prepares to take a shot during a practice at UOP's Chris Kjeldsen Pool. [CLIFFORD OTO/RECORD FILE 2017]

By Roger Phillips  
Record Staff Writer

STOCKTON — In the spring of 2012, a friend suggested to James Graham that he read "Moneyball," a book that chronicles how the low-budget Oakland A's used all sorts of data to level the playing field against their wealthier opponents.

Graham was in the offseason after a mediocre 13-12 season in his fifth year coaching University of the Pacific's men's water polo team.

And the following year, he also was to become coach of the women's team, which had finished its season with a dismal 11-18 record.

Here's where "Moneyball" comes in. After finishing the book, Graham decided he would begin using data to improve the performance of Pacific's water polo teams.

In the years since, the men's team has compiled a 100-35 record. The women went 83-69 from 2013-17, and this year's Tigers got off to another fast start.

"Our goal as a program is to be the most innovative water polo program in the world," 40-year-old Graham said recently. "We're trying to use data to inform all the decisions in every aspect of the program."

"It doesn't mean we're going to always use everything the data says, but we're using it to make better decisions. It's like having an extra person in the room arguing with you."

Graham pointed to several graphs. One showed opposing players' "shooting DNA," as Graham put it — an opponent's tendencies "based on the location they're at in the pool and what tactic they're using."

Brinnley Barthels, a 21-year-old senior on the women's team, said that when she arrived at Pacific following high school, she had no idea water polo analytics even existed.

"James threw all this information at us," Barthels said. "It was honestly kind of comparable to another class. ... I like it. It makes a lot of sense when we're training knowing the details. It helps us learn what we need to do against our opponents."

It's fitting that analytics and innovations are popular in Stockton sports. After all, Billy Beane, the architect of "Moneyball," is the executive vice president of the A's. And Oakland's Single-A farm team, the Stockton Ports, is the training ground for the A's of the future.

Right next door to Stockton Ballpark is Stockton Arena, home of the Stockton Heat of the American Hockey League. The Heat, the top minor-league affiliate of the NHL's Calgary Flames, also use analytics to improve how the team performs on the ice.

"At our level, we don't get super technical with some of the equational statistics that take a little more manpower," Heat assistant coach Cail MacLean said. "We tend to focus a lot on (scoring) chances, the amount of chances for and against that are generated in all situations."

MacLean said the Heat additionally provides players with individualized "development plans" sent to Stockton by the Calgary Flames. The development plans hone in on specific areas where each skater has room for improvement on the road to the NHL.

"On a purely kind of systematic level, (the Flames) want to know these players



Stockton Heat coach Ryan Huska leads a practice at the first day of training camp for the 2016-17 season. [CLIFFORD OTO/RECORD FILE 2016]

have the know-how and have been trained in the way they're approaching the game," MacLean said. "Calgary has visions for players in their system and (how) they want them to turn out."

Back at Pacific, Graham said analytics have helped him get through to some of his more stubborn players on the men's team.

"Young men think they know a lot," Graham said. "It's very difficult sometimes

to get them to realize that you might know more. But it's really hard to argue with math. It creates a common language that everyone can buy into, and they have a very hard time disproving it."

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