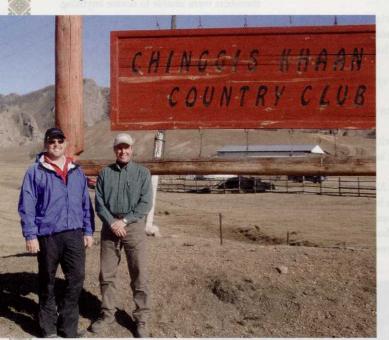
WORLD TURF

Below: The author with architect David Dale, GolfPlan, at the local country club. Right: Darak Gadzinski, superintendent, who is Polish has worked in Eastern Europe. He speaks Polish, Russian, Spanish and English, a very valuable skill.



GOLF in MONGO

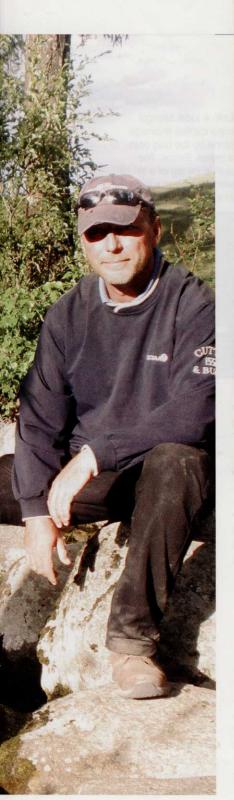
Freelance agronomist Jim Connolly shares his adventures in getting golf off the ground in the land of Genghis Kahn.

JIM CONNOLLY

A s I landed at the Genghis Khan Airport in Ulaanbaatar, Mongolia I thought about how little I knew about this country. Taxiing to the terminal, I looked out the window to see an array of old biplanes parked in a field, beside them were several Cold War-

era Russian Tupalev passenger jets with dismantled engines, and next to all of this were a half dozen new Lear jets that are reserved for the rich and prosperous. Mongolia – a land of extremes.

Ulaanbaatar is the coldest capital city in the world located at



40,00 feet on the rolling steppes of inner Asia with Siberia to the north and China to the south. Mongolia is rich with natural resources such as timber and vast deposits of minerals. The country is changing from a very poor country into a developing nation that is attracting foreign



MCS hired GolfPlan-Fream, Dale and Ramsey Golf Course Architects from Santa Rosa, Calif., to provide the design and spearhead the hiring of an international team of consultants responsible for delivering a world-class facility. They have designed courses in more than 60 countries, including The Club at Nine Bridges in South Korea. GolfPlan has designed courses in every corner of the globe, and can now add Mongolia to its list of exotic locations such as Nepal, and Tunisia.

GolfPlan contacted my company, JCC Ltd., to handle all agronomic issues.

My first visit to the site was in October 2009 to gather information on soils and climate and to begin the task of specifying seed, fertilizer, greens mix, mowing equipment and other agronomic issues. The climate in Ulaanbaatar is arid, with wintertime temperatures of 50 degrees below zero with summertime temperatures approaching 100 degrees. The seeding window is very narrow and any seed planted after August 15 and not protected during the winter has little chance of survival.

Mongolia's landscape of consists of millions of acres of grasslands grazed for thousands of years. Native grasses include Siberian Barley, Xerophytes, Needle grass, Wheat Grass, Feather Grass, Oat Grass and fescue. There are many wild non-grass plants such as Wild Onion, Ge-



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Far left: Heave ho on the rubber lake liner. This lake is huge, about 10 surface acres. They apply a geotextile first and then drag this liner. Top: In August, we found ice in the mainline at a depth of 3.5 meters. This is a homemade steam maker. They stuffed a pvc hose into the pipe after they cut a hole in it and then jammed the steam hose in there. Above: Fairway conditions at Chingis Khaan (Genghis Kahn) CC – tight and dry.

WORLD TURF

ranium, poppy and many small flowering plants.

Many of the golf course native areas are being planted with these varieties purchased from various Russian sources. The greens will be seeded to Jacklin Seed Co. T-1 creeping bentgrass, Kentucky bluegrass fairways and irrigated rough and a mixture of sheep, hard, and fine fescue for the rough.

Greens will be protected during the winter with heavy sand topdressing and geotextile blankets. Greens mix is 100 percent and fairways are top soiled with six inches of screened loam. The irrigation system is valve-in-head Toro 800 series heads with a Watertronics pump station.

Finding a qualified superintendent to supervise the construction, seeding and early maintenance was not easy. The applicant must be willing to work six months, take six months off during the long winter and relocate to the world's coldest capital city. He also has to tolerate occasional electrical outages, hot water shortages, speak Russian and be able to lead and train a



Jimmy Stevens (US), Bill Jackson (US), Aren Fredrikson (Canada) and Robin Gibson (US). Golf course Architects David Dale and Jim Slugocki, along with irrigation designer David Bedingfield, visit the site on a regular basis to ensure the course is being built to design specifications.

Coordinating a construction crew in a country that has no It is worth noting that Sky Resort is not Mongolia's first golf course. It is the first golf course with 100 percent grass. About an hour from Ulaanbaatar is Genghis Kahn Country Club, a par 72, 18-hole course with artificial tees and greens. The caddies direct you toward a vast expanse of brown, non-irrigated pasture leading to an artificial

"The physical and mental challenge of working in a foreign country is very high, and when communication is lacking, it can become an impossible situation."

crew with no golf construction experience or used grass for anything but grazing animals.

Enter Darek Gazdzinski. Polish born with golf experience in Spain, Canada, US and Poland. Darek speaks Polish, Russian, Spanish and English.

The physical and mental challenge of working in a foreign country is very high, and when communication is lacking, it can become an impossible situation.

Darek is directing the day-today tasks in preparation for seeding this past August and in spring 2011. Also supporting Darek is project manager Craig Brown (Australia), equipment operators

experience with golf construction or land development is a difficult task. The best outcome is to find a few local leaders who can keep over 60 workers focused on one job. Sky Resort has several projects going at once and workers are shuffled between clubhouse construction, ski slope maintenance, infrastructure development and building a golf course. The frost level is deep and sometimes lasts all year. We had to melt ice in August from a mainline 14 feet deep. This, in addition to extremely rocky soil, has complicated the golf course construction and presents some unique challenges.

carpeted green complete with carpet seams, ripples and shreds of material. It is almost impossible to stop a shot on the greens because you have to land the ball about 75 yards short of the green and hope it comes to rest on the firm and very fast putting surface. Stopping the ball on the green is like lagging a cue ball on a billiard table. The fairways are mostly composed of crispy brown weeds and a thin cover of fescue. The maintenance equipment consists of one old 5 gang Japanese fairway mower, a Craftsman belly-mount rotary and a few brooms for sweeping debris off the carpeted greens. Swing, a

Left: A local Mongol crew carries drainage stone by the bag onto a green. Below: The author on top of a ski hill with the construction site in the background.



puff of dust and off you go.

Golf follows economic prosperity and Mongolia's future looks bright due to the demand for energy, coal and mineral exports to China and Russia. Sky Resort hopes to draw clientele from foreigners as well as local people. The golf course also has a teaching academy and practice range that will grow interest in the game. Ulaanbataar population is 1.2 million and Mongolia has 3 million people and 30 million livestock. There are more than 50 foreign embassies in Ulaanbaatar and a number of foreign teachers and business people. The ski area was opened this year and produces excellent snow due to the low temperatures. The golf course will be part of a full-service resort with spa, hotel and amenities.

Genghis Khan once said, "Meat is for man, grass is for animals." Mongolians love sport and perhaps Genghis would approve of grass being used for a sport like golf. In any event, given his reputation, I would not want to be around if he did not. **GCI**

Jim Connelly is a certified agronomist, former USGA agronomist and president of JCC Ltd.