

plentiful oil reserves. He notes that Ghawar is the "king" field and is flanked by a score of lesser fields, ranging from "queen" size in Abqaiq to much smaller pools.

Simmons also suggests that Saudi production is very near its peak. But the feedback he has received from technical people who have read the book, leads him now to believe that Saudi Arabia has "actually exceeded sustainable peak production already."

"And I think at the current rates they are producing these old fields, each of the fields risks entering into a rapid production collapse," he said.

Simmons said energy economists are reluctant to even entertain the notion that Saudi oil output is past its peak because they really don't understand the difference between oil supply peaking and running out of oil.

"I continue to remind people that the difference is as profound as someone saying, 'I'm getting a little bit hungry,' and someone saying, 'I have about two more minutes to live before I starve to death,'" Simmons said. "... We will never run out of oil, in our lifetime, our children's lifetime, our grandchildren's lifetime. But by 2030 we could easily have a world that can only produce 10 or 15 or 20 million barrels per day, and the shortfall from what we thought we were going to produce is only a modest 100 million barrels per day. So this is really a major, major, major global issue."

Compounding the problem is that every energy supply model used by economists today starts with the assumption that Saudi oil is plentiful, Simmons said. "What's interesting is that we've based all of this assumption on no data," he explained.

Meanwhile, as the world's thirst for oil grows, Saudi Arabia and other oil-producing countries will be unable to keep pace. Some analysts say Saudi Arabia is capable of producing 20 million to 25 million bpd, but Simmons says that level of production is "impossible."

"And I also believe that—Ghawar, for instance, which is really the whole nine yards, because that is 60 percent of their production—that North Ghawar, which is the top 20 percent of the field, has a productivity index that is about 25 times the productivity index of the rest of Ghawar, and that's the area that is almost depleted now," Simmons observed. "And when that drops, you could basically see Ghawar go from 5 million down to 2 million bpd in a very short period of time."

Until now, Simmons said the United States has been lucky because Saudi oil production was 3 million bpd when U.S. oil production peaked in 1971. Saudi output soared and today ranges from 9 million bpd to 11 million bpd.

Elsewhere, explorers discovered the last three great provinces of brand new oil in the last three years of the 1960s—Prudhoe Bay in Alaska in 1967–68; Siberian oil fields in the same period of time; and oil in the North Sea in 1969.

"And Siberia, Alaska, and North Sea oil, effectively combined to produce: the North Sea peaked in 1999 at a little over 6 million bpd, it's already down 25 percent; Alaska oil peaked in the 1990s at 2 million bpd; it's now at about 900,000 bpd; and Siberia oil peaked at about 9 million bpd; and it's about 5 million bpd," Simmons said. "And we haven't basically found another province since the late '60s."

To meet growing demand from existing customers as well as a new surge in demand from emerging countries such as China and India, Simmons said producers have continued to pull more and more oil out of the North Sea. "And then we found deep water which was a fabulous last shot from the basins (in which) we already had shallow water production. And we took the Middle East oil

back up to unsustainably high levels of production," he said. "So probably, we're sweeping the cupboard bare. People looked at the way we were able to do this and thought, 'Wow! This is actually easy,' without realizing what we were actually doing was totally non-sustainable."

America needs more oil sources and Alaska is a good place to look, Simmons said. As for ANWR, he said it's ludicrous for people, whether geologists or environmentalists, to make definitive statements about the quantity of oil reserves in the refuge.

"Drilling on the (North) Slope has been tricky. Otherwise, it would not have been so hard to find the 'king,' Prudhoe Bay, or we would never have drilled Mukluk," he said. "So we shall never know whether ANWR is a series of dry holes or where the missing 'queen' of the slope lies until an intense drilling is done. A few dry holes does not mean much either."

The environmental community's claim that ANWR contains only a six months supply of oil is a calculation that assumes the nation has no other source of oil when ANWR oil comes on line, Simmons said.

"On that standard, we end any new energy development, period," Simmons said. "What is very important about the urgent need to find more oil at ANWR, the Naval Reserve or somewhere else on the slope is the inevitable decline of North Slope oil, and the fast decline that will happen if a gas pipeline is built and the gas caps (are) blown down."

Moreover, it would not take 10 years to get a big oil find in ANWR into production since the infrastructure is in place, Simmons observed.

"At some point, the oil that flows through the 2 million bpd pipeline must fall to a level insufficient to get oil over the Brooks Range other than by shutting in for part of a month so the oil can be batched," he explained. "If all ANWR does is extend the life of the pipeline, it has filled a very valuable role."

"If a 'lord' is found, let alone a 'queen,' it is a home run," he added.

As for the rest of Alaska, Simmons said he has no idea whether the state contains other large pools of oil. "The only way oil is ever found (and gas, too) is to drill wells," he said.

Though the world needs more oil sources, Simmons does not see additional reserves curbing prices in the long term.

While others lament the high price of oil, the investment banker says crude oil at current prices of 18–20 cents a pint is "cheap."

"Obviously it's cheap. I don't know what's the next cheapest liquid we actually sell in any bulk is, that has any value. I suspect there are places around the United States where municipal water costs more than 18 cents a pint," he observed. "And yet for some reason, we created a society built on a belief that oil prices in a normal range were some place in the \$15–20 level. It turns out \$15 per barrel, which is the average price of oil—in 2004 dollars—it sold for, for the last 140 years, is less than 4 cents a pint. So we've basically used up the vast majority of the world's high flow rate, high quality sweet oil at prices that were effectively so cheap, you basically couldn't sustain an industry. And now we're left with lots of oil. But it's heavy, gunky, dirty, sour, contaminated-with-various-things oil. It doesn't come out of the ground very fast, is very energy intensive to get out of the ground, and we're going to pay a fortune for it."

Simmons predicted we would encounter problems with oil supplies this year, nearly a month before Hurricane Katrina struck the Gulf Coast.

He said we must operate the nation's refineries at 100 percent, or we have major product shocks, and we have to import oil at a

rate of 10 million to 11 million bpd, or we lose crude oil stocks. We have to basically create almost 3 million bpd of finished product imports and we have to run the system 24/7, all summer long, and we still liquidate stocks, he said.

"So we have actually now created a pending domestic embargo, and we're going to be lucky to get through the summer without some periodic shortages," he told Financial Sense Newshour the week of Aug. 6. "We probably will, but the odds are probably as high we will have some shortages, and then if we get through the summer we have a fabulous respite from Labor Day to Thanksgiving, until we hunker to try to figure out how the world gets through the Winter of 2005 and 2006 because oil demand globally could easily go to 86–88 million bpd during the winter, and that could easily exceed supply by 2 million to 5 million bpd."

In a worst case scenario, Simmons said oil prices could easily soar past \$100 a barrel without slowing down.

Such high prices would simply be a sticker shock, not an end to driving, he said. "At \$3.20 a gallon, gasoline costs 20 cents a cup. A cup of gasoline can take a full car of people about 1½ miles. If you think this is expensive, try and hire a rickshaw or a horse-drawn wagon and pay only 20 cents to go a mile and half. After haggling price for an hour or so, you pay about \$5 to \$6 for the ride and thank the person for not making you walk."

To cope with the coming oil shock and much higher oil prices, Simmons told Financial Sense Newshour, the world, led by the United States, will have to become drastically energy efficient virtually overnight. A series of changes, including transporting all goods that currently travel by truck, by rail or water, could cut oil consumption 20–40 percent, he said.

"So by getting trucks off our highway system we have a major impact on removing traffic congestion. And traffic congestion is public enemy number 1 through 5 on passenger car fuel efficiency. So it's a real win, win, win," he observed.

He also suggested returning to a system of growing most foods close to where they will be consumed and using technology to allow people to work at home or in their village rather than requiring them to commute to a central location.

Simmons also advocates jumpstarting the largest energy R&D program ever envisioned, and "just pray that over 5–7 years it has the same impact as when people got serious about developing radar, and developing nuclear power, so that we could actually win World War II."

"But if we don't do these things, then this really ends up being a very dark world—no pun intended," he added.

HONORING OUR ARMED FORCES

TRIBUTE TO JOHN FLYNN AND PATRICK STEWART

Mr. REID. Mr. President, I rise today to say a few words about two heroes from Nevada who were killed in Afghanistan this weekend. Their names were John Flynn and Patrick Stewart, and my heart goes out to their families today.

John and Patrick were courageous soldiers—true American heroes. John was from Sparks. He had two young children. Patrick was from Reno. He also had two children. Both of them were distinguished soldiers who did their part to make the world a better, safer place.

On behalf of all Nevadans—and indeed all Americans—I offer my deepest condolences to the Flynn and Stewart families. They have paid the ultimate price for their country, and we are forever indebted to them. It was John and Patrick's mission to keep us safe, and they performed this mission with honor.

It's never easy when one of our soldiers dies, but we can seek small comfort in the fact that their sacrifice will never be forgotten. It's because of the bravery of these individuals and others like them that we are free today.

This morning, I'd like to also remember the hundreds and hundreds of brave men and women from Nevada who are serving this country in Iraq, Afghanistan, and even in devastated regions of our own country. My thoughts are with these soldiers, and I continue to pray for their safety.

LOCAL LAW ENFORCEMENT ENHANCEMENT ACT OF 2005

Mr. SMITH. Mr. President, I rise today to speak about the need for hate crimes legislation. Each Congress, Senator KENNEDY and I introduce hate crimes legislation that would add new categories to current hate crimes law, sending a signal that violence of any kind is unacceptable in our society. Likewise, each Congress I have come to the floor to highlight a separate hate crime that has occurred in our country.

On July 7, 2004, two men were attacked outside a local restaurant by 10 to 12 men. The apparent motivation for the attack were their sexual orientation. According to police, the men were yelling anti-gay slurs during the attack.

I believe that the Government's first duty is to defend its citizens, to defend them against the harms that come out of hate. The Local Law Enforcement Enhancement Act is a symbol that can become substance. I believe that by passing this legislation and changing current law, we can change hearts and minds as well.

SIMON WIESENTHAL: IN MEMORIAM

Mrs. BOXER. Mr. President, I rise to share with my colleagues the memory of one of the world's heroes, Mr. Simon Wiesenthal, who died on September 20, 2005, at the age of 96.

Simon Wiesenthal was a Holocaust survivor who dedicated his life to honoring its victims by bringing its perpetrators to justice. By fighting against intolerance and genocide everywhere, he worked tirelessly to see that "never forget" would someday mean "never again."

We in California have a special bond with Simon Wiesenthal because the Simon Wiesenthal Center is based in Los Angeles. Founded in 1977, the Wiesenthal Center preserves the memory of the Holocaust and continues the work of Simon Wiesenthal by fostering tolerance and understanding through

community involvement, educational outreach, and social action. Today, the center also includes the world-renowned Museum of Tolerance.

Simon Wiesenthal was born on December 31, 1908, in western Ukraine. He received his degree in architectural engineering from the Technical University of Prague in 1932. After graduation, he worked as an architect in Lvov, Poland. In 1936, he married his high school sweetheart, Cyla Mueller.

Three years later, Germany and Russia signed their nonaggression pact and partitioned Poland. As a result, the Soviet Army occupied Lvov and began purging Jewish professionals. Simon was forced to close his business and work in a bedspring factory. Many of his family members were imprisoned or killed. Simon tried to save his family from deportation by bribing the Soviet Secret Police. However, he and his wife were sent to the Janwska concentration camp and then to a forced labor camp for the Eastern Railroad. By 1942, nearly 90 members of his and his wife's family perished.

Simon was able to help his wife Cyla escape through the Polish underground on false papers. However, after escaping the forced labor camp in 1943, Simon was captured and sent back to Janwska. When the Soviet Army advanced on the German eastern front, he was forced to join SS guards on a march westward. The march ended in the Mauthausen concentration camp. Simon narrowly survived when Mauthausen was liberated by the Americans on May 5, 1945. At 6 feet tall, he weighed 100 pounds.

In late 1945, Simon and his wife were reunited. Both had believed the other to be dead. In 1946, their daughter Paulinka was born.

Simon spent the rest of his life tracking down Nazis and working to bring them to justice. He said that in various ways he helped bring 1,100 former Nazis to trial. Of these were Adolf Eichmann, who supervised implementation of the "Final Solution," Karl Silberbauer, the Gestapo officer who arrested Anne Frank, and Hermie Braunsteiner Ryan, who supervised the killing of hundreds of children at a Polish camp.

Mr. Wiesenthal prepared evidence on Nazi atrocities for the war crimes section of the U.S. Army. He headed the relief and welfare organization, Jewish Central Committee of the United States Zone of Austria. After the Nuremberg Trials, Simon opened the Historical Documentation Center in Linz, Austria, to assemble evidence for future Nazi trials. The center was eventually relocated to Vienna and continues to gather and analyze information on German war criminals and neo-Nazi groups; thousands of former Nazis are considered still at-large throughout Germany today.

For his courage and commitment to justice, Mr. Wiesenthal has been honored with many awards, including: the U.S. Congressional Gold Medal presented to him in 1980 by President Jimmy Carter; the United Nations League for the Help of Refugees Award; and an honorary British knighthood.

Mr. Wiesenthal is survived by his daughter Paulinka Kreisberg, who lives in Israel, and three grandchildren.

With the passing of Simon Wiesenthal, the world has lost one of its great heroes, but we shall never lose sight of the lesson he taught us: that humanity will rise up against hate and tyranny, and those who commit crimes against humanity will be brought to justice. As Mr. Wiesenthal said in a 1964 article in the New York Times Magazine:

[w]hen we come to the other world and meet the millions of Jews who died in the camps and they ask us, "What have you done?" there will be many answers. . . . But I will say, I didn't forget you.

TRIBUTE TO JEFFREY C. GRIFFITH

Mr. DODD. Mr. President, I take this opportunity to recognize a dedicated public servant at the Congressional Research Service, Jeffrey C. Griffith, who is retiring this month after 30 years of service to the U.S. Congress. A recognized expert in information technology, Mr. Griffith led CRS into the digital age and was instrumental in developing and implementing an integrated Legislative Information System, LIS, for the Congress.

He has been particularly helpful to the Senate Rules Committee and served as an information technology adviser and facilitator to then Chairman JOHN WARNER and Ranking Member Wendell Ford during the implementation of the committee's strategic planning process for information technology in the Senate. Mr. Griffith's expertise and his understanding of the Senate institution proved invaluable to the committee during a critical time when the committee was grappling with expanded Internet use, including the development and expansion of the legislative information system, and changing technology expectations and opportunities in the Senate.

Mr. Griffith earned both A.B. and MAT degrees at Harvard College and a masters in library science from UCLA. He came to the Library of Congress in 1976 as a participant in the Library of Congress Intern Program and then moved on to the Congressional Research Service in 1977. In the years since, he has held positions of increasing responsibility and he retires as the chief legislative information officer.

Leading change in information technology has been the hallmark of Mr. Griffith's career. In the early days of automation, he played a key role in developing SCORPIO, a system for retrieving legislative and public policy information that was one of the first systematic uses of digital information in the Federal Government. Similarly, he led the effort to automate CRS's request management system, ISIS, which helps CRS assure Members of Congress and their staff that their information