

There are no posts below your current threshold: [Change](#) | [Favorite!](#) | [Print Thread](#)[BinkyClowner](#)
(agitator)
08/14/05 10:54 AM **Oil Fields Are Refilling... Naturally - Sometimes Rapidly** [Post [293882380](#)]**Category:** News & Opinion (General) **Topic:** News & Current Events**Synopsis:****Source:** [Rense](#)**Published:** January 1, 2001 **Author:** Robert Cooke**For Education and Discussion Only. Not for Commercial Use.**

There Are More Oil Seeps Than All The Tankers On Earth
By Robert Cooke
Staff Writer - Newsday.com
4-10-5

Deep underwater, and deeper underground, scientists see surprising hints that gas and oil deposits can be replenished, filling up again, sometimes rapidly.

Although it sounds too good to be true, increasing evidence from the Gulf of Mexico suggests that some old oil fields are being refilled by petroleum surging up from deep below, scientists report. That may mean that current estimates of oil and gas abundance are far too low.

Recent measurements in a major oil field show "that the fluids were changing over time; that very light oil and gas were being injected from below, even as the producing [oil pumping] was going on," said chemical oceanographer Mahlon "Chuck" Kennicutt. "They are refilling as we speak. But whether this is a worldwide phenomenon, we don't know."

Also not known, Kennicutt said, is whether the injection of new oil from deeper strata is of any economic significance, whether there will be enough to be exploitable. The discovery was unexpected, and it is still "somewhat controversial" within the oil industry.

Kennicutt, a faculty member at Texas A&M University, said it is now clear that gas and oil are coming into the known reservoirs very rapidly in terms of geologic time. The inflow of new gas, and some oil, has been detectable in as little as three to 10 years. In the past, it was not suspected that oil fields can refill because it was assumed the oil formed in place, or nearby, rather than far below.

According to marine geologist Harry Roberts, at Louisiana State University, "petroleum geologists don't accept it as a general phenomenon because it doesn't happen in most reservoirs. But in this case, it does seem to be happening. You have a very leaky fault system that does allow it to migrate in. It's directly connected to an oil and gas generating system at great depth."

What the scientists suspect is that very old petroleum -- formed tens of millions of years ago -- has continued migrating up into reservoirs that oil companies have been

exploiting for years. But no one had expected that depleted oil fields might refill themselves.

Now, if it is found that gas and oil are coming up in significant amounts, and if the same is occurring in oil fields around the globe, then a lot more fuel than anyone expected could become available eventually. It hints that the world may not, in fact, be running out of petroleum.

"No one has been more astonished by the potential implications of our work than myself," said analytic chemist Jean Whelan, at the Woods Hole Oceanographic Institution, in Massachusetts. "There already appears to be a large body of evidence consistent with ... oil and gas generation and migration on very short time scales in many areas globally," she wrote in the journal *Sea Technology*.

"Almost equally surprising," she added, is that "there seem to be no compelling arguments refuting the existence of these rapid, dynamic migration processes."

The first sketchy evidence of this emerged in 1984, when Kennicutt and colleagues from Texas A&M University were in the Gulf of Mexico trying to understand a phenomenon called "seeps," areas on the seafloor where sometimes large amounts of oil and gas escape through natural fissures.

"Our first discovery was with trawls. We knew it was an area of massive seepage, and we expected that the oil seeps would poison everything around" the site. But they found just the opposite.

"On the first trawl, we brought up over two tons of stuff. We had a tough time getting the nets back on board because they were so full" of very odd-looking sea-floor creatures, Kennicutt said. "They were long strawlike things that turned out to be tube worms.

"The clams were the first thing I noticed," he added. "They were pretty big, like the size of your hand, and it was obvious they had red blood inside, which is unusual. And these long tubes -- 3, 4 and 5 feet long -- we didn't know what they were, but they started bleeding red fluid, too. We didn't know what to make of it."

The biologists they consulted did know what to make of it. "The experts immediately recognized them as chemo-synthetic communities," creatures that get their energy from hydrocarbons -- oil and gas -- rather than from ordinary foods. So these animals are very much like, but still different from, recently discovered creatures living near very hot seafloor vent sites in the Pacific, Atlantic and other oceans.

The difference, Kennicutt said, is that the animals living around cold seeps live on methane and oil, while the creatures growing near hot water vents exploit sulfur compounds in the hot water.

The discovery of abundant life where scientists expected a deserted seafloor also suggested that the seeps are a long-duration phenomenon. Indeed, the clams are thought to be about 100 years old, and the tube worms may live as long as 600 years, or more, Kennicutt said.

The surprises kept pouring in as the researchers explored further and in more detail using research submarines. In some areas, the methane-metabolizing organisms even build up structures that resemble coral reefs.

It has long been known by geologists and oil industry workers that seeps exist. In Southern California, for example, there are seeps near Santa Barbara, at a geologic feature called Coal Oil Point. And, Roberts said, it's clear that "the Gulf of Mexico leaks like a sieve. You can't take a submarine dive without running into an oil or gas seep. And on a calm day, you can't take a boat ride without seeing gigantic oil slicks" on the sea surface.

Roberts added that natural seepage in places like the Gulf of Mexico "far exceeds anything that gets spilled" by oil tankers and other sources.

"The results of this have been a big surprise for me," said Whelan. "I never would have expected that the gas is moving up so quickly and what a huge effect it has on the whole system."

Although the oil industry hasn't shown great enthusiasm for the idea -- arguing that the upward migration is too slow and too uncommon to do much good -- the search for new oil and gas supplies already has been affected, Whelan and Kennicutt said. Now, companies scan the sea surface for signs of oil slicks that might point to new deposits.

"People are using airplane surveys for the slicks and are doing water column fluorescence measurements looking for the oil," Whelan said. "They're looking for the sources of the seeps and trying to hook that into the seismic evidence" normally used in searching for buried oil.

Similar research on known oil basins in the North Sea is also under way, and "that oil is very interesting. There are absolutely marvelous pictures of coral reefs which formed from seepage [of gas] from North Sea reservoirs," Whelan said.

Analysis of the ancient oil that seems to be coming up from deep below in the Gulf of Mexico suggests that the flow of new oil "is coming from deeper, hotter formations" and is not simply a lateral inflow from the old deposits that surround existing oil fields, she said. The chemical composition of the migrating oil also indicates it is being driven upward and is being altered by highly pressurized gases squeezing up from below.

This upwelling phenomenon, Whelan noted, fits into a classic analysis of the world's oil and gas done years ago by geochemist-geologist John Hunt. He suggested that less than 1 percent of the oil that is generated at depth ever makes it into exploitable reservoirs. About 40 percent of the oil and gas remains hidden, spread out in the tiny pores and fissures of deep sedimentary rock formations.

And "the remaining 60 percent," Whelan said, "leaks upward and out of the sediment" via the numerous seeps that occur globally.

Also, the idea that dynamic migration of oil and gas is occurring implies that new supplies "are not only charging some reservoirs at the present time, but that a huge fraction of total oil and gas must be episodically or continuously bypassing reservoirs completely and seeping from surface sediments on a relatively large scale," Whelan explained.

So far, measurements involving biological and geological analysis, plus satellite images, "show widespread and pervasive leakage over the entire northern slope of the Gulf of Mexico," she added.

"For example, Ian MacDonald at Texas A&M has published some remarkable satellite photographs of oil slicks which go for miles in the Gulf of Mexico in areas where no oil production is occurring." Before this research in oil basins began, she added, "changes in reservoir oils were not suspected, so no reliable data exists on how widespread the phenomenon might be in the Gulf Coast or elsewhere."

The researchers, especially the Texas team, have been working on this subject for almost 15 years in collaboration with oil industry experts and various university scientists. Their first focus was on the zone called South Eugene Island block 330, which is 150 miles south of New Orleans. It is known as one of the most productive oil and gas fields in the world. The block lies in water more than 300 feet deep.

As a test, the researchers attempted to drill down into a known fault zone that was thought to be a natural conduit for new petroleum. The drilling was paid for by the U.S. Department of Energy.

Whelan recalled that as the drill dug deeper and deeper, the project seemed to be succeeding, but then it abruptly ended in failure. "We were able to produce only a

small amount of oil before the fault closed, like a giant straw," probably because reducing the pressure there allowed the fissure to collapse.

In addition to the drilling effort and the inspection of seeps, Whelan and her colleagues reported that three-dimensional seismic profiles of the underground reservoirs commonly show giant gas plumes coming from depth and disrupting sediments all the way to the surface.

This also shows that in an area west of the South Eugene Island area, a giant gas plume originates from beneath salt about 15,000 feet down and then disrupts the sediment layers all the way to the surface. The surface expression of this plume is very large -- about 1,500 feet in diameter. One surprise, Whelan said, was that the gas plume seems to exist outside of faults, the ground fractures, which at present are the main targets of oil exploration.

It is suspected that the process of upward migration of petroleum is driven by natural gas that is being continually produced both by deeply buried bacteria and from oil being broken down in the deeper, hotter layers of sediment. The pressures and heat at great depth are thought to be increasing because the ground is sinking -- subsiding -- as a result of new sediments piling up on top. The site is part of the huge delta formed over thousands of years by the southward flow of the massive Mississippi River. Like other major deltas, the Mississippi's outflow structure is continually being built from sands, muds and silts washed off the continent.

Analysis of the oil being driven into the reservoirs suggests they were created during the so-called Jurassic and Early Cretaceous periods (100 million to 150 million years ago), even before the existing basin itself was formed. This means the source rock is buried and remains invisible to seismic imaging beneath layers of salt.

In studying so-called biomarkers in the oil, Whelan said, it was concluded that the oil is closely related to other very old oils, implying that it "was probably generated very early and then remained trapped at depth until recently." And, she added, other analyses "show that this oil must have remained trapped at depths and temperatures much greater than those of the present-day producing reservoirs."

At great depth, where the heat and pressure are high enough, she explained, methane is produced by oil being "cracked," and production of gas "is able to cause sufficient pressure to periodically open the fracture system and allow upward fluid flow of methane, with entrapment of oil in its path."

Copyright © 2002, Newsday, Inc.
<http://www.newsday.com/features/ny-feat-hcov0416.story>

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[BinkyClowner](#)
(agitator)
08/14/05 10:55 AM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To:

[BinkyClowner](#) | Post [293882386](#), reply to [293882380](#)] (Score: 1)

Flag to: wadosy, rebelx, newswatcher, nolajbs, tet, Jradcliffe, E_T, laonas

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[whatever](#)
(insurgent)
08/14/05 10:57 AM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To:

[BinkyClowner](#) | Post [293882392](#), reply to [293882380](#)] (Score: 1)

When someone tells me US oilcos underestimated their reserves because they haven't already considered this replenishment, that's when I'll spit out my lunch.

.... an' it's refilling faster and faster!

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[savagesteve13](#)
(agitator)
08/14/05 11:33 AM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To: [whatever](#) |
Post [293882512](#), reply to [293882392](#)] (Score: 1)

Oil pollutes, and thats the problem in a nutshell. Our quality of life will go down the tubes if we continue to use it for energy production.

For the Jesus-Heads---> God put oil deep within the planet for a reason, cuz it isn't good for us.

For the secularists----> Oil locks away the massive amounts of carbon on this planet safely away from the surface, so life can continue to thrive.

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[Kudzu](#)
(Back to basics)
08/14/05 11:34 AM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To: [whatever](#) |
Post [293882519](#), reply to [293882392](#)] (Score: 1)



The great interior deserts of Arabia were ALL ocean 60 million?? years ago... There's probably an awful lot of oil since most of the Peninsula has yet to be explored.

"NEVER AGAIN" (unless you are Palestinian)

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[Brittney_Hole](#)
(radical)
08/14/05 11:42 AM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To: [savagesteve13](#) | Post [293882544](#), reply to [293882512](#)] (Score: 1)

Quote:

Oil pollutes, and thats the problem in a nutshell. Our quality of life will go down the tubes if we continue to use it for energy production.

For the Jesus-Heads---> God put oil deep within the planet for a reason, cuz it isn't good for us.

For the secularists----> Oil locks away the massive amounts of carbon on this planet safely away from the surface, so life can continue to thrive.

Amen.

Oil wells do not refill themselves.

This is a total fucking ruse to keep us on fossil fuels.



Let's develop solar power and wind power asap.

Yours Sincerely

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[BinkyClowner](#)
(agitator)
08/14/05 11:47 AM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To: [Brittney_Hole](#) | Post [293882562](#), reply to [293882544](#)] (Score: 1)

Brit you are missing the point. As well as the guy before you.

Those against "Peak Oil" theorism are not for the destruction of the ecology. It's just that the "Peak Oil" liars are trying to justify raising the price of gas.

Everyone knows that oil is destroying us and our planet.

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[BinkyClowner](#)
(agitator)
08/14/05 11:51 AM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To:

[Brittney_Hole](#) | Post [293882573](#), reply to [293882544](#)] (Score: 1)

Flag to: Brittney_Hole, rebelx

Do you realize how much dinosaur fossils it would take to manufacture the amount of oil the world consumes? It is absolutely absurd to say that we get our oil from dinosaurs.

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[Brittney_Hole](#)
(radical)
08/14/05 11:55 AM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To:

[BinkyClowner](#) | Post [293882590](#), reply to [293882562](#)] (Score: 1)

Quote:

Those against "Peak Oil" theorism are not for the destruction of the ecology. It's just that the "Peak Oil" liars are trying to justify raising the price of gas.

Everyone knows that oil is destroying us and our planet.

Well, God damn it, when will Toyota develop a "Hybrid" car, with battery, that prepetually runs off of a solar panel during the day? I have to ask myself why I still have not seen this...

Yours Sincerely

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[Brittney_Hole](#)
(radical)
08/14/05 11:57 AM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To:

[BinkyClowner](#) | Post [293882594](#), reply to [293882573](#)] (Score: 1)

Oil is not from dinosaurs. It is from all pre-historic life- including jungles, trees, plants, animals that died millions of years ago. It does have an organic origin. We can make bio-fuel not from soy oil. Why aren't we doing this?

Yours Sincerely

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[lewis](#)
(maverick)
08/14/05 12:03 PM

 **Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly**  [To:

[BinkyClowner](#) | Post [293882602](#), reply to [293882573](#)] (Score: 1)

"Do you realize how much dinosaur fossils it would take to manufacture the amount of oil the world consumes? It is absolutely absurd to say that we get our oil from dinosaurs."

It's not just dinosaurs, it's all organic life. But you know, that's just how the theory goes, so it could be wrong.

The fact of the matter is that we need oil for materials. Cars and electricity generators put aside, we need the oil to make polymers. There's no other source of hydrocarbon chains that meets our demands and without them you can expect to see the life expectancy dive like a plane with its wings blown off.

Now and then I read about folks engineering plants to produce some of the reagents we need, but growing, harvesting, and then extracting the reagent from these plants will require an investment of hydrocarbons. Will the yield from the crops warrant that?


[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[Brittney_Hole](#)

(radical)
08/14/05 12:10 PM



Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly  [To: [lewis](#) | Post [293882610](#), reply to [293882602](#)] (Score: 1)

Quote:

Cars and electricity generators put aside, we need the oil to make polymers.

Bacteria generate plastic- you can't tell the difference between the plastic (polyester) made by bacteria and regular plastic. The plastic made by bacteria breaks down in the soil instantly.

Look it up, it has been around for many years.

Ask yourselves why you have never heard of it....

Yours Sincerely


[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[Brittney_Hole](#)

(radical)
08/14/05 12:11 PM



Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly  [To: [lewis](#) | Post [293882612](#), reply to [293882602](#)] (Score: 1)

In addition, we don't need new plastic- we need to use recycled plastic. We have also ignored recycling technology- I wonder why?

Yours Sincerely


[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[JustStopIt](#)

(Son of Liberty)
08/14/05 12:11 PM



Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly  [To: [savagesteve13](#) | Post [293882613](#), reply to [293882512](#)] (Score: 2)

Oil pollutes, and thats the problem in a nutshell. Our quality of life will go down the tubes if we continue to use it for energy production.

Nonsense.

Oil locks away the massive amounts of carbon on this planet safely away from the surface, so life can continue to thrive.

Do you know what the definition of the word "organic" is?


No matter who you vote for, the government always gets elected

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

[A_Bert](#)

(Son of Liberty)
08/14/05 12:20 PM

Re: Oil Fields Are Refilling... Naturally - Sometimes Rapidly  [To: [BinkyCrawler](#) | Post [293882631](#), reply to [293882380](#)] (Score: 2)

The last time I sneaked onto FR I signed on as Snakeoil.

An appropriate title for this article. The more you use the more you got.
Those fishes and loaves tricks sure keep people mesmerized.

A+Bert - [This site is nothing more than a hoax perpetrated on you dummies who post](#)

[Reply](#) | [Private Reply](#) | [Flag](#) | [First](#) | [Last](#) | [Context](#)

Post Extras:    

 [Favorite!](#) |  [Print Thread](#)

◀ [Previous](#) ▲ [Index](#) ▶ [Next](#) ≡ Flat  [Threaded](#)

Jump to | [News & Current Events](#)

libertyforum.org | [Contact Us](#)

[Ain't Nobody's Business If You Do](#)

[Main Index](#) | [Latest Articles](#) | [Latest Posts](#) | [Self Search](#) | [Search](#) | [Control Panel](#) | [Who's Online](#) | [FAQ](#) | [Logout](#) | [User List](#)

Fair Use Notice

This site contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We make such material available in an effort to advance awareness and understanding of issues relating to civil rights, economics, individual rights, international affairs, liberty, science & technology, etc. We believe this constitutes a 'fair use' of any such copyrighted material as provided for in section 107 of the US Copyright Law. In accordance with Title 17 U.S.C. Section 107, the material on this site is distributed without profit to those who have expressed a prior interest in receiving the included information for research and educational purposes.

For more information please visit: <http://www.law.cornell.edu/uscode/17/107.shtml>.

If you wish to use copyrighted material from this site for purposes of your own that go beyond 'fair use', you must obtain permission directly from the copyright owner.