

ANALYSIS

Still groping for truth on the financial crisis

By John Authers

It has been eight years since Lehman Brothers went bankrupt, and still it defines the calendar. For anyone in the financial world, time is divided into Before Lehman and After Lehman.

And yet, even after eight years, the crisis's lessons are controversial. Anger is as intense as ever. And when it comes to making the financial system proof against another Lehman, every day seems to bring further proof that we do not know what we thought we knew.

This week, Senator Elizabeth Warren said the next president should reopen investigations into senior bankers who avoided prosecution, and that the FBI should release its notes on its investigations. The failure to punish any senior bankers over the scandal angers the populist left and right, the world over.

But while most people are disgusted that bankers got away scot-free, the bankers themselves - or at least their shareholders - feel that they have been punished.

Over the past 10 years, banks globally have underperformed the rest of the market by about 50 percent, according to MSCI. Their profits have flatlined for years and remain below their level before the crisis. Trading revenues are down, and once bustling trading rooms are almost deserted.

Post-crisis financial reforms, forcing big banks to hold far more capital as a cushion and barring them from risking depositors' capital by trading on their own account, have combined with low interest rates -



The Lehman Brothers corporate sign in polished metal is taken into an auction house in London on September 24, 2010

which make it harder to make a profit - to make banking duller and less profitable, albeit less risky.

Such an outcome seemed inevitable in 2008. But many believe post-crisis re-regulation has been inadequate. In a divisive US presidential campaign, one commitment that appears in both parties' platforms is to bring back Glass-Steagall, the Depression-era law that barred commercial banks from investment banking or insurance. Glass-Steagall was repealed in 1999, with bipartisan support. It seemed obsolete and unnecessary. None of the institutions to fail in the crisis, including Lehman, mixed commercial and investment banking. But the belief that we need to do more remains intense.

The banks to survive 2008 in best shape have been built up as role models, then torn down. After the likes of Goldman Sachs, JP-Morgan and HSBC, it is the turn of Wells Fargo, which became the world's biggest bank by market value post-crisis thanks to a focus on commercial banking and a fierce sales-driven culture. For 20 years, Wells and its predecessors have referred to "stores" not "branches". It was a simple and effective business model, until it emerged that the hot sales culture had encouraged widespread fraud and misrepresentation. Now Wells is firing staff, its shares have tumbled and it is no longer the world's most valuable bank.

Another belief that may not be true

is that central banks have grown too powerful. By pumping out money and expanding their balance sheets, they are ever more significant economic actors.

But post-crisis reforms may have robbed the Federal Reserve of precisely the powers it will need to avert the next Lehman. That, according to a fascinating new book, *Connectedness and Contagion*, by Hal Scott of Harvard Law School, is because of a final truth we thought we knew - the crisis of 2008 was not what we thought it was.

Mr Scott says correctly that the popular explanation for the crisis was "connectedness" - the domino effect when the failure of one institution leads to failures of others that

lent to it or relied on it for funding. Attempts to make banks hold more capital and indulge in fewer risks, and to regulate those that are "systemically important" revolve around attacking connectedness.

But Mr Scott shows that none of the banks that fell or were rescued were important enough to another big institution to cause its failure. Instead, Lehman nearly brought down the financial system through "contagion", or the fear of connectedness. That led short-term funding markets on which banks relied for funding and which paid company payrolls, to dry up as trust evaporated. Contagion is about basic psychology.

Thanks to anger over the bailouts banks received, the Federal Reserve has since lost key powers to deal with contagion which centre on its role as "lender of last resort", propping up markets as they dried up, and bailing out institutions whose parlous state was scaring the market. Its freedom to act this way again has been greatly circumscribed.

Many believe the 2008 bailouts were a waste of taxpayers' money. But once the panic subsided, they were generally repaid. So if Mr Scott is right that we have to fear our own fear more than anything else, re-regulation has only reduced any dynamism in the financial sector, while making it more vulnerable to contagion than it was before.

The events of eight years ago were a profound shock. A stunned reaction was unavoidable. But we are still stunned, and groping for the truth.

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Mongolia: Living from loan to loan

By Lucy Hornby

Presiding over skinned sheep carcasses in Ulan Bator's largest wholesale meat market, stall owner Gantulkhuur has become one small part in the debt binge rippling through Mongolia. She whips out a small ledger. Names and numbers in neat Cyrillic script crowd tighter and tighter on the pages, as her accounts have been taken over by retailers buying on credit. The retailers, for their

part, are selling smaller cuts of mutton, Mongolia's staple food, or cheaper intestines and organs as their customers try to eke out their savings.

"I used to sell all my meat in a day, but now I don't," she says. "People's buying power has decreased."

Mongolia was a darling among emerging markets during the commodities boom. Foreign miners flocked to exploit the mineral wealth under its grasslands and deserts, pushing up growth in

gross domestic product by 17 percent in 2011. But after a debt-fuelled spending spree at the peak of the cycle, the landlocked country is now one of the worst hit by the downturn.

Mongolia's efforts to extricate itself highlight the dangers of the "resource curse" - the notion that countries blessed with tremendous natural resources find themselves at the mercy of wealth-destroying boom-bust cycles.

Success will allow the buffer state to continue balancing between China and Russia by attracting "third neighbour" allies like Japan or the US. Failure could upend that careful balance in China's favour, dragging Mongolia into its orbit just like Cambodia, Laos or some of the weaker Central Asian nations.

In recent weeks the government has announced a trimmed budget and raised interest rates by 4.5 percentage points to staunch a weakening

currency. International financial institutions are preparing to offer loans if Mongolia requests assistance to overcome a looming payments crunch next year.

Meanwhile, Chinese creditors are making a case for greater investment concessions in an echo of complaints from western investors. Even if the fiscal crisis is navigated, individuals and businesses are struggling with debt at extortionate interest rates. Once known for their no-

madic lifestyle, Mongolians have become a majority urban people, trading a culture of self-sufficiency for one in which nearly everyone owes money.

An influx of mining cash helped create jobs and social welfare programmes that reduced the poverty rate to 22 percent by 2014, from 39 percent four years before, according to the World Bank. But living in cities also means paying for everything, from food to clothing to childcare, ►►

Mongolia: Living from loan to loan (continued)

while jobs and cash handouts are drying up.

Gantulkhuur says the switch from cash to credit accelerated last autumn as life got “a bit difficult”. But then she pauses: “Is it OK to talk to you? I am worried I am shedding a bad light on Mongolia.”

Over the past month Mongolia's government has consolidated budgets and revealed to an alarmed public that, even with spending cuts, the budget deficit will reach 18 percent of GDP this year, well above the statutory limit of 4 percent, while government debt would reach 78 percent of GDP, far above the 55 percent target.

The announcements led to a surge in purchases of dollars, which caused the tugrik to weaken precipitously, making it the world's worst-performing currency in August. That triggered a rise in rates to 15 percent and restrictions on the amount of foreign currency that could be withdrawn in a day.

Mongolia's total external debt is now estimated at USD23.5 billion, nearly twice its \$12 billion economy. Of that, government debt is about \$8.4 billion. Over the past year, “the situation has got a lot worse but it is an opportunity for us to reform our economy”, says Zandanshatar Gombojav, a member of parliament who has spent his career in a number of financial posts for the ruling Mongolia People's party.

Reform efforts consist of a mix of belt-tightening and promotion of new mining projects in the hope that the commodity cycle will soon recover.

Hefty repayments begin in March, when a \$580 million bond issued by the Development Bank of Mongolia comes due. The country must repay \$1.7 - \$1.8 billion over the next two years, including a swap agreement with China's central bank.

Mongolia has not formally requested assistance from the International Monetary Fund but it is expected to do so this autumn. Once it does, the Asian Development Bank, World Bank and Japan, its largest source of development aid, could chip in at interest rates of about 1



In this July 4, 2012 photo, a Mongolian national flag flutters in the wind near an apartment building under construction in downtown Ulan Bator

These days, the desert is no barrier to indebtedness. The extent to which corporations are in debt to China is anyone's guess

percent, considerably less than its existing obligations. China's Asian Infrastructure Investment Bank might also lend to new projects, at rates of up to 2.5 percent.

Mongolia tapped the IMF in 2009 and paid off the \$232 million loan early thanks to strong prices for coal and copper, its main exports. This time around, public finances again depend on a recovery in commodity prices. The \$5.3 billion expansion of the Oyu Tolgoi copper and gold mine is expected to start producing significantly around 2021.

But Ulan Bator will not see dividends from the project for as long as 15 years, thanks to an arrangement whereby Rio Tinto finances its one-third share of the costs at Libor plus annual interest of 6.5 percent.

Neither the MPP nor the Democratic party, which lost in a landslide in July, could resist raising social spending commitments before every election over the past decade

as politicians basked in the promise of windfall mining revenues. Many initiatives were kept off the official budget to avoid the 4 percent deficit ceiling.

Programmes included better salaries for civil servants and popular payouts like the monthly “child money” or student subsidies. Other loans were taken out to fund ambitious mining projects that never expanded as quickly as planned, leaving the payments extended over a longer period than anticipated. And then there were the international bonds, the most recent issued at 10.5 percent. “No other country borrows at such high rates as Mongolia,” one foreign banker said. “Other countries might be worse risks but they simply don't come into the market.”

Borrowing has transformed Mongolian life. Subsidised mortgages with a repayment rate of 8 percent made apartments affordable for young middle-class cou-

ples and fed a property bubble on the back of the mining boom. Road projects to connect every aimag, or province, have opened the land to domestic and foreign tourists. Far-flung scenic spots are now accessible to car owners on overnight outings. There has been a proliferation of tiny tour agencies run by English-speaking Mongolians in possession of a Land Rover.

One-off payments for roads and infrastructure IOUs make up a good portion of this year's budget deficit, potentially putting Mongolia on a relatively sounder footing of a deficit of about 12 percent of GDP by next year. But the loans taken out by miners who were caught in the downturn or concessionaires who won the road tenders are causing concern.

Many suspect that construction groups sought Chinese loans at lower rates of interest than are available in Mongolia. The tugrik's depreciation against the dollar and the renminbi will make those more difficult to repay.

This is Mongolia's deepest collective fear. Conquerors of much of Eurasia 800 years ago, Mongolian territory has gradually diminished until the remnants were divided by the Soviets and the Chinese in the early 20th century.

The country today consists of mountains, grassland and deserts as big as France and has been democratically governed since the 1990s after decades as a Soviet satellite. Most of its people are aware that 3 million Mongolians cannot compete with China's 1.3 billion citizens beyond the Gobi desert.

These days, the desert is no barrier to indebtedness. The extent to which corporations - or the businessmen-turned-MPs that control them - are in debt to China is anyone's guess.

In defending the tugrik the central bank has drawn down about RMB11 billion (\$1.6 billion) of a RMB15 billion swap agreement with the People's Bank of China, which was offered at 6.5 percent interest. Mongolian politicians expect the swap to be extended when it expires in 2017. The Chinese have become impatient at delays and contractual changes on proposed mining, industrial and dam

projects.

Mongolian banks are lobbying hard to prevent the Bank of China from establishing a branch in Ulan Bator, ostensibly to serve the 7,000 small Chinese businesses in the country. Mongolian banks lend at annual rates of 22-28 percent and private lenders offer about 36 percent interest. By contrast, average Chinese corporate bank lending rates were 5.6 percent in June and 10-20 percent is common in the Chinese shadow banking market.

Mongolian bankers fear Chinese businesses will gain a sudden advantage as borrowers quickly refinance at Chinese rates. That would pull the rug out from under local banks, increasing the economy's dependence on China.

“They will swallow Mongolia,” one businessman concluded gloomily. “In a few decades we'll be the autonomous region of Outer Mongolia.”

Already, Mongolia's private lenders have been burnt by the tugrik depreciation. Many borrowed overseas at cheaper rates to lend to car buyers, small businesses and distressed individuals in Mongolia. Some of that borrowing finances the pawnshops around Ulan Bator whose yellow signs advertise loans for televisions, phones and laptops. Some pawnshops had signs taped to the door advertising 14-day loans at 9 percent interest. A woman working in a shop with better rates - 8 percent over 30 days - said she has seen a steady flow of customers but the value of items has deteriorated over the past year.

Zandanshatar, the MP, says many people have borrowed against their pensions and salaries through 2018. “That is another sign of the liquidity problem.”

Banks charge a punishing 18 percent for borrowing against pensions, increasing the general indebtedness of the poor. The problem is acute in the ger districts, the sprawling settlements of migrants that have turned Ulan Bator into home for more than half of Mongolia's population. The busy, ramshackle areas are barely supplied with power or water. Social subsidy programmes like the monthly payments of \$9 for each child are a lifeline for many families.

In a quiet restaurant decorated with striped green wallpaper and lace curtains, customers join in a lively discussion of the public finances as well as their own. Most see the two as linked, and worry about dependence on China.

Erdenebayar, the restaurant owner, is “living from loan to loan”, after an ill-timed decision to go into the business just as the commodity cycle turned.

“Although Mongolians are working, we are in debt. We owe money to other countries,” he says. “As a Mongolian, obviously I am concerned.”

On the steppes Nomadic herders face a very modern ritual

Even Mongolia's nomads have been caught up in the country's debt problem. Loans have become an annual ritual on Mongolia's steppes, where herders capitalising on a growing market for cashmere are hostage to a downward cycle of falling margins and deteriorating pastures.

In the spring, herders sell wool; in the autumn, meat. Sales go to pay off old loans and take new ones at rates that often exceed 20 percent a year. The catch is the larger the herd, the easier it is to get bank loans but the larger herds also destroy the pastureland faster than new grasses can grow.

The goats, which grow cashmere as an undercoat, are especially destructive. Cashmere is a cash crop and a useful export for Mongolia, what one tourist website refers to as “the nomad's ATM”.

But goats destroy pasture far more than camels,

horses or cattle and the deterioration in the quality and variety of grasses forces herders to raise more animals to eke out more cash from the same land.

The government says it is trying to encourage quality over quantity. But if every herder culls enough to restore the pastureland the crash in meat prices would eat away at their ability to pay off the banks.

“Every herder has a loan. The more livestock you have the bigger the loan,” says Batzorig, a 20-year-old, motorcycle-riding herder with a wide smile and 2 million tugriks (USD900) of debt, equivalent to about three months' wages in a city job.

Batzorig and his younger brother have their mother to thank for cutting their dependence on the herding cycle. A few years ago, she trimmed the family animals from 1,000 to 600 and bought a house in a town.



Workers fix the access road to Pipa Island, a tourist attraction inside the Rason Special Economic Zone



Seamstresses stitch together clothing at a factory in the Rason Special Economic Zone in North Korea

By Eric Talmadge

Trade zone bustle exposes limits of North Korea sanctions

DESPITE North Korea's deepening isolation, along its border with China and Russia construction of tourist hotels is brisk and mountains of Siberian coal await shipment to Shanghai. A bustling bazaar-style market is overflowing with goods from Mickey Mouse baby shoes to bags of dried kiwi fruit.

The Rason Special Economic Zone, a North Korean experiment in limited capitalism, isn't likely the next-big-thing-in-Asia that officials here paint it to be. But even as the country is hunkering down under the toughest U.N.-backed sanctions in decades for its nuclear and long-range missile programs, it is, by North Korean standards, thriving.

For the U.S., South Korea and Japan, Rason is an irritating reminder that not everyone is on board with shutting off trade to Pyongyang, especially when there is money to be made. The three countries are spearheading efforts to impose even more punitive measures on North Korea for its fifth nuclear test, which was conducted last week and was the North's most powerful to date.

North Korean officials in charge of trade promotion acknowledge that sanctions and fears of image problems resulting from doing business with the North have significantly slowed the expansion of new foreign businesses — from an average of more than a dozen each year over the past five years to exactly zero so far in 2016.

But they also note that thanks largely to China and Russia, the sanctions have hardly been a death knell. That holds for North Korea in general — its GNP is believed to be growing slightly and signs of economic improvements such as more goods available, more taxis and traffic on the streets and more people frequenting markets, particularly in the capital, Pyongyang, are noticeable.

"The more sanctions we are subject to, the more powerful our country will become," Choe Sung

Jin, an official in charge of trade promotion, told The Associated Press on a visit to the remote zone shortly before Friday's nuclear test. Clearly the sanctions hurt, but Choe's remark is something along the lines of the old adage, "what doesn't kill you make you stronger."

Rason is as far from Pyongyang as a North Korean city could be, tucked into the country's northeast corner. Its economic zone has been a mixed bag of success and failure, but that is only partially because of sanctions.

Unlike Kaesong, the now-closed special industrial complex on the other end of the country near the Demilitarized Zone that was powered by South Korean investment, Rason still has the look of a haphazard attempt at squaring capitalist investment and management techniques with authoritarian socialist ideals.

Pyongyang is aware it needs to lure foreign investment to keep afloat — developing a nuclear arsenal while maintaining a million-man army and attempting to raise the nation's standard of living is an expensive proposition. But it is not so desperate to revive its moribund economy that it will risk major changes that might jeopardize its political status quo.

In May, leader Kim Jong Un stressed at a major party congress that expanding trade with foreign countries is a priority. At the same time, however, he stood by his nuclear weapons program, which, because of the sanctions it brings, makes expanding trade exceedingly difficult.

Yet it's not impossible, judging by Wharf No. 3 — the Russian wharf — of Rason's Rajin port.

The wharf looked deserted when the AP visited three years ago, but on its latest trip, the loading area was piled high with

mountains of Siberian coal brought in on Russian trains. The coal was to be transferred to large cargo vessels, either Russian or Chinese, for shipment southward.

A Russian railway from Khasan in Siberia across the border to Rason began operations in 2014. Kim Chol Ho, the port's vice manager, said shipments have been steadily increasing ever since.

"The Russians plan to bring more than 1 million tons of coal through here this year," he said. "That's a 300,000-ton increase over last year."

The appeal of Rason to the Russians is simple: It's a gateway to Chinese markets.

Transshipments of coal through the North aren't banned under the U.N. sanctions, and it's far cheaper to transit Rason than to get coal to the Chinese using other routes or means. Russian and Chinese cargo ships are used because the North doesn't have any ships built for that purpose that are big enough.

Kim noted, as officials here often do, that there is no other port this far north that can be used by ships in the 15,000- to 20,000-ton class all year round. The others in the Russian far east freeze over.

Two other ports are located in the special zone: Sonbong moves about 3 million tons of petroleum and other cargo each year and Ungsang has an annual turnover of 500,000 tons, primarily of timber, according to statistics released for investors in 2015.

"We now have a regular cargo ship traveling between Rason and Shanghai," Kim said. A few hours later, a Russian train arrived with more coal. The next day, a huge Chinese ship was in port, ready to take it all away.

Officials claim total foreign

investment in the zone is more than USD500 million. About 250 enterprises — local and foreign — are now operating here. Two of the biggest are the Suchaebong Fishery Enterprise, which processes seafood for domestic consumption and export to China, and the Sonbong Garment Factory, where clothing is stitched together and given a "Made in China" tag before being sent back across the border for sale abroad.

The rationale behind that — aside from China being a more palatable country of origin than the North in most markets — is that the materials and designs are provided by China, though the stitching is done in North Korea.

Roughly 80 percent of the 100 foreign trade enterprises, 21 joint ventures and six foreign representative offices in Rason are Chinese. Thailand, Japan, Dominica, Hong Kong, Italy and Russia are also doing business in Rason. Choe said there are even some U.S. entrepreneurs — though he refused to name them

and they could not be quickly confirmed.

"We welcome anyone," he said after playing a promotional video that featured the song "Roll out the Barrel."

Choe said the opening of enterprises in Rason went from 70 over the past five years to zero this year because of sanctions announced after the North's January nuclear test, which was followed the next month by a rocket launch that put a satellite into orbit.

Other signs of economic weakness in Rason predate sanctions. As is often the problem with major, large-scale projects in North Korea, there is no sign of activity at the sprawling Sungri Chemical Factory, an oil refinery built in 1973 under national founder and "Eternal President" Kim Il Sung, Kim Jong Un's grandfather. The refinery, believed to be one of only two in the country, has been idle for years.

But, on the smaller scale, living standards do appear to be improving.

Rason has one of North Korea's biggest and best-stocked free markets and a new public gymnasium. A "children's palace" for extracurricular activities is under construction and new hotels dot what was until recently a largely barren main street. After major floods last year, 1,800 new dwellings were erected, creating a residential area that is, by North Korean standards, quite livable and tidy.

"We have an indoor bathroom, that's a big change," Ra In Hae, a 54-year-old housewife, said after turning off the one-channel radio attached to the wall of her new home, which Kim himself visited just after her family moved in. "We even have a little garden to grow vegetables." AP

▲ Fears of image problems resulting from doing business with the North have significantly slowed the expansion of new foreign businesses

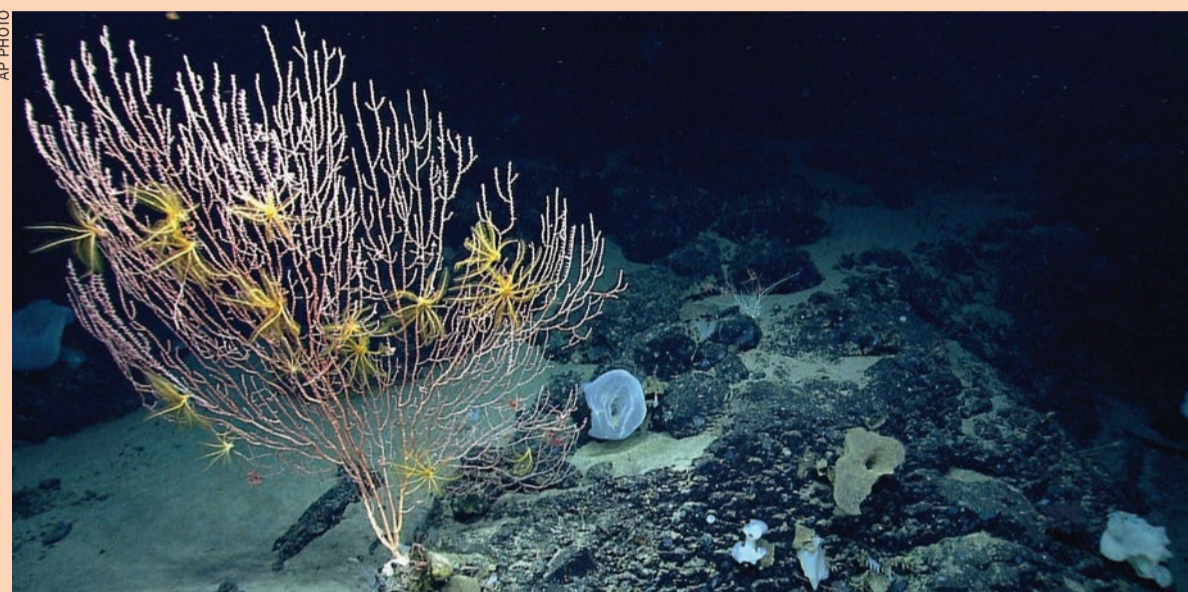
Fishermen upset over creation of Atlantic's first monument

FISHERMEN in New England say President Barack Obama needlessly dealt a big blow to their industry when he created the Atlantic Ocean's first marine national monument and circumvented the existing process for protecting fisheries.

The new Northeast Canyons and Seamounts Marine National Monument consists of nearly 5,000 square miles of underwater canyons and mountains off the New England coast. The designation will close the area to commercial fishermen, who go there primarily for lobster, red crab, squid, whiting, butterfish, swordfish and tuna.

After the announcement, fishermen pondered their next move: sue, lobby Congress to change the plan or relocate. It's hard to move, they said, because other fishermen would likely already be fishing where they would want to go.

They said the designation process wasn't transparent and the administration should have let the New England Fishery Management Council, which is charged with regulating the re-



This undated file photo shows corals on Mytilus Seamount off the coast of New England in the North Atlantic Ocean

gion's fisheries, finish working on the coral protection measures it's considering.

"There seems to be a huge misconception that there are limitless areas where displaced fishermen can go," said Grant Moore, president of the Atlantic Offshore Lobstermen's Association. "Basically with the stroke of a pen, President Obama put fishermen and their crews out of work and harmed all the sho-

re-side businesses that support the fishing industry."

The lobstermen's association and other fishermen wanted the White House to allow fishing in depths of up to 450 meters, so they could still go there but still protect deep-sea corals. Annually, about 360,000 kilograms of lobster are caught near the canyons, according to the lobstermen's association.

White House officials said

the administration listened to industry's concerns and made the monument smaller, with a seven-year transition period for the lobster and red crab industries.

Industry advocate Robert Vanasse said it's clear the plan will lead to a decrease in supply and raises prices. It's difficult to gauge the economic impact this early, added Vanasse, executive director of Saving Seafood.

The New England Fishery Management Council said it now needs to reassess its management strategy given the new developments. Mary Beth Tooley, a council member from Maine, said the public process used by the council "is the way it should be done" and she's disappointed it was circumvented.

However, the designation was widely praised by environmentalists as a way to sustain important species and reduce the toll of climate change.

Priscilla Brooks, of the Conservation Law Foundation, said it's a "very small area" compared to what's currently open to fishing. She said the White House struck a balance so there would be a "soft landing" for the industry, with seven years to phase out fishing.

"The fishing activities taking place in the monument aren't compatible with the protection of vulnerable marine life," she said.

Brad Sewell, of the Natural Resources Defense Council, said fishing gear has been seen on top of coral and has entangled marine mammals. He worries these problems will worsen over time as fishing gear reaches deeper.

"You want to protect an area like this is when it's relatively pristine," he said. "The time to do it is now, not wait until the damage is done." MDT/AP

ASK THE VET

By Dr Ruan Du Toit Bester



TOTAL DOG HEALTH: THE COMPREHENSIVE GUIDE

Complete dog health is a hodgepodge of key elements including nutrition, supplementation, and preventatives. Not only do these key elements integral to your dog's overall health, but they also promote vitality, mental stability, and overall well-being. Secondary aspects of dog health include remedies and treatments. Remedies such as aromatherapy and herbalism can aid in easing symptoms of hundreds of conditions and treatments such as massage, acupuncture, and hydrotherapy can help dogs stay healthy physically and mentally.

DOG NUTRITION

Good dog nutrition is one of the best ways to avoid a number of common conditions such as dog constipation, diarrhea, allergies, chronic skin conditions, frequent stomach upsets, bad breath, ear infections, hyperactivity, anxiousness, aggressiveness, and anxiety, to name a few. To avoid common dog conditions the best thing you can do for your dog is to avoid low-quality, low-nutrition, commercial dog food and buy high-quality products with a 40/50/10 ratio. This means, 40% meat, 50% veggies, and 10% carbohydrate. It is also important to avoid dog foods that use by-products as well as preservatives such as BHT,

BHA, and Ethoxyquin. Choose premium brand food as they do not contain fillers, by-products or harmful chemical preservatives. They contain 100% natural and nutritious human-grade ingredients. Add bulking agents to the diet, such as bran, pumpkin, or methylcellulose, can help prevent constipation as well. In addition to feeding your dog a balanced, high-quality diet, you should:

- Always provide fresh water
- Keep them away from trash and bones
- Avoid feeding them table scraps

DOG SUPPLEMENTATION

Dog supplements can be a great benefit to your pet in the long-run. No matter how healthy a type of dog food may be, not all dog food contains all of the vitamins and minerals your dog needs. Antioxidants, in particular, are important for optimal dog health for several reasons. Antioxidants have healing properties, they assist the body's natural defense mechanism and in turn boost the immune system, and they decrease the effects of free radicals. The best dog supplements should contain vitamins A, C and E, and vitamins B, B1, B2, B3, B5, B6 and B12.



DOG PREVENTATIVES

Besides feeding your dog a balanced diet and supplements, exercise is one of the most important ways to help prevent a number of common conditions. Just a few common dog conditions include heart problems and obesity. Exercise can even prevent emotional problems. Exercise also promotes joint health, healthy bones, bone density, and even self confidence. Walking, running, fetching/catching, and swimming are all excellent exercises for dogs. Several 15 minute walks per day might be plenty for some dogs, such as pugs, while playing at the dog park for an hour or so with other dogs may be just what a German Shepherd needs. No matter what size or breed your dog may be, some exercise is always better than no exercise at all.

ORAL HEALTH

Oral health is one of the most neglected aspects of dog health. Unfortunately, when you neglect your dog's dental

health, you open the door to a number of preventable health issues. In addition to the usual suspects such as bad breath gingivitis, and periodontal disease, poor oral hygiene can lead to tonsillitis, pharyngitis (sore throat), kidney infections, and infections involving the heart valves. To ward off diseases related to poor oral health, brush your dog's teeth regularly and see your vet for regular check-ups and cleanings.

Hope this info helps
Till next week
Dr Ruan

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