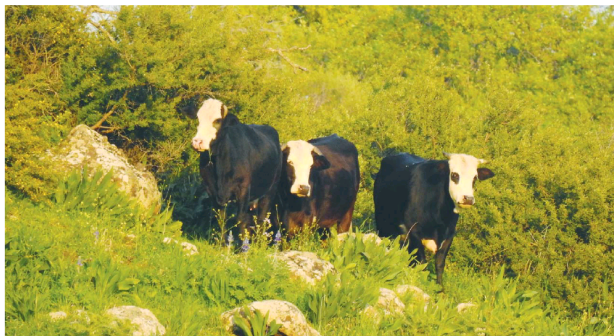


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WHILE THE HERD originally comprised 150 wild cows, the herd now only numbers about 40. (Rachel Gabrieli)

The independent cows of the Golan Heights Since 1967, a unique, free-ranging bovine herd has thrived on the Golan Heights. Their champion hopes they will receive official protection from the state

By RACHEL WALKS ZAVIT Science and the Environment News Agency

Anyone who walks in the afternoon between Nahal Meshushim Nature Reserve and Nahal Zaviton on the Golan Heights might see them - a head of several dozen grazing cows. At first glance you might think that this is a normal herd of mature cows and their small calves, brown, black and white, peacefully walking between the rocks and bushes. But unlike other cows often encountered while hiking in the North, these cows do not belong to a farmer, or anyone for that matter. In fact, this is the only free herd of cows in Israel.

The origin of this wild herd (already nicknamed the "Syrian cattle herd" or the "Baladi herd") is similar to that of many of the industrial cow herds that currently exist in the Golan Heights.

These cows originally belonged to Syrian farmers, but after the Six Day War, they didn't end up moving to Syria with them. They instead remained on the Golan Heights, forming the basis for the established Israeli cattle in the region," said Rachel Gabrieli, director of Beef Cattle Services for the Agriculture Ministry.

According to her, most of these cows were collected by Israeli breeders after 1967, but not all of them. "A herd of about 150 cows remained that were not collected. Apparently, these were the more temperamental cows - the ones who were difficult to lead to the corral. They just stayed in the area, and since then they have not been owned by people."

"Thriving in the wilderness" "These cows are actually behaving like wildlife," Gabrieli said. "They collect their own food in the wild, feed their calves naturally, and receive zero food supplements or veterinary treatments."

By contrast, cows raised for the meat and dairy industry are unable to produce enough milk for feeding without the food supplements given to them by workers. This is because in recent decades, the breeds of industrial cows in Israel have undergone significant changes.

"Females have been mated with males from abroad, causing Israeli breeds to gradually become more similar to European and American cows. As a result, they can produce more meat and greater amounts of milk, but they aren't adapted to local conditions in Israel, and therefore they need a lot of supportive care. In general, production is in conflict with durability," Gabrieli explained.

Farm cows are also required to receive vaccines against diseases, and treatments for ticks to prevent tick fever, one of the main causes of morbidity and mortality for cows in Israel.

The wild cows, however, have not undergone any cultivation since 1967 and have thus remained mostly unchanged from the cows that lived in the area in those days - smaller and more adapted to local conditions.

"When we travel to third-world countries, we usually can't drink the water, but the locals can. It's the same for local animal breeds like cows who develop resistance by gradually being exposed to pests and diseases over years and generations, and it acts like a vaccine," said Gabrieli. "It's a breed that is maximally adapted to the environment in which it lives."

As part of this adjustment, the wild cows are slightly smaller than those belonging to the industrial herds.

"The cows weigh a little less than 400 kilograms, while the average cow in the Israeli herd currently weighs about 550 to



RACHELI GABRIELI, director of Beef Cattle Services for the Agriculture Ministry. (Courtesy)

600 kilograms," she said. "The wild cows are also much more athletic, and they are able to escape like a missile and run down a slope like a deer."

A misinformed culling The close and compact nature of the herd also protects the wild cows from hunting threats.

"In the past, there were illegal attempts to hunt them, but as the cultivation progressed, their meat lost much of its value. It is a very lean meat that has little monetary value," said Gabrieli.

However, other factors have significantly harmed the herd over the years, and even threatened its continued existence. "In the 1990s, veterinary services feared that the herd was a source of disease, so an order was issued to eradicate them," said Gabrieli. "Out of 150 cows that lived in the herd at the time, 70 were shot. The killing only stopped when Dr. Doron Thomkin, who was a veterinarian for a neighboring farm at the time, created a very broad public protest."

Gabrieli went on to point out that the cows that died after being shot were later examined, and they were found to be absent of any sort of disease.

After the tragic event, the herd of cows lived quietly for almost 30 years. However, a few months ago a new threat to their existence arose.

"Sources in the Nature and Parks Authority wanted to eliminate the herd because they blamed them for the pollution of the streams in the area," said Gabrieli. "However, according to a quantitative calculation I made, the maximum possible contribution of Escherichia coli from cow excrement into nearby streams was about four units. The Ministry of Health, on the other hand, determines that a particular river or stream is only dangerous for human bathing if the pollution is over 400 units. It's clear then that the contamination has another source, one that is not derived from cattle."

"The people of the Nature and Parks Authority were not ready to hear me," she continued. "The director general of the Ministry of Agriculture issued a letter to the Nature and Parks Authority stating that the professionals in the ministry were convinced that the herd is not the source of the pollution, but it did not convince them. In the end however, we managed to dissuade the Nature and Parks Authority from taking action against the herd with the help of Tal Gilboa, the prime minister's adviser on animal affairs, who established a direct dialogue with the authority."

The Nature and Parks Authority responded by stating the herd's close proximity to the creek channel was what prompted their concern and that along

side the Environmental Protection Ministry, the Agriculture Ministry and the Water Authority, water troughs would be placed far from foot paths and fences would be installed to reduce cattle activity from occurring too close to the stream. However, they also noted, "This is not a protected animal, but a wild animal that has gone wild."

Indigenous durability While the herd originally comprised 150 wild cows, their numbers today are much smaller and the herd only stands at about 40 individuals, of which close to half are females and half are males. According to Gabrieli, the reason for this is likely due to the significant culling the herd experienced in the 1990s. "Once you kill individuals from a population, especially when it comes to a herd, which has a very delicate social fabric, it impairs the herd's ability to recover, and that's probably what happened to this herd," she said. "When a population size falls below a certain threshold, its rate of reproduction decreases because its genetic diversity is smaller, so its resistance is impaired. If a new disease suddenly appears, which some cows are resistant to and some are not, too many cows will be harmed."

Gabrieli believes it is also possible that the breedings between individuals within the same family due to the small size of the population, among other things, harms the fertility of the offspring.

According to Gabrieli, it is important to keep the wild cows on the Golan for the sake of the cows that belong to farmers.

"Due to the effects of the climate crisis and the expansion in the spread of disease, we will need the durable and resistant traits of the original breeds and integrate the genes responsible for their resilience into cultivation programs," she said. "This knowledge does not exist in the world, and it should be produced here in Israel."

Beyond that, the responsibility of Israel to preserve the wild cows is part of the country's commitment to international conventions, particularly the UN's Convention on Biological Diversity. The issue of local indigenous breeds is gaining great importance in the world today and it is also reflected in such international conventions," said Gabrieli.

"These 40 cows are not a nuisance, and they were not a nuisance even when they were at their peak size. They didn't steal pasture from anyone, and they didn't cause any harm to humans, the environment, or neighboring herds. There has never been a justifiable reason to harm them, and I would be very happy if the herd manages to survive for generations to come," she concluded.

ASTROLOJEW By LORELAJ KUDE Dramatic changes kick off a long, hot summer

Horoscopes for Sivan 5781

This is the month of Shavuot, celebrating Divine revelation. Big dramatic changes are revealed with the onset of eclipse season, the two-and-a-half-month-long sojourn of Jupiter/Tzedek into Pisces as preview to his longer stay there during 2022, the conjunction of Venus/Noga to the North Lunar Node, retrograde Saturn/Shabbtai and Mercury/Kochav, and one intense opposition of Mars/Ma'adim to Pluto.

Jupiter enters Pisces on May 13, heralding a renewal of faith and optimism, dreams and unmetred truth, and spiritual wisdom. Venus in Gemini conjuncts the North Node on May 17, delivering an infusion of communicative and creative power. The "fated" or "meant to be" is confined - or dramatically denied. Saturn's retrograde beginning May 23 exposes huge chasms in matters of personal responsibility for those who depend on others for authority and decision-making. The Full "Super Blood" Moon Total Lunar Eclipse in Sagittarius on May 26 escalates the dynamic tension between information and meaning, facts and beliefs, data and interpretation. Blind followers of unexamined dogmas will be forced to confront unmetred truth, as well as the consequences of lazy thinking.

Mercury conjuncts Venus and then goes retrograde on May 29. Idealism is tested; is "good enough" close enough to "perfect", or is "perfect" a constantly moving and ultimately unattainable target? What can you live with - and what can you learn to live without? A clue might appear at the trine of Venus to Jupiter on June 2, supporting abundance, prosperity, pleasure, and positive vibes.

Intense power struggles over matters of personal and public security kick off a long, hot summer when Mars in Cancer opposes Pluto in Capricorn on June 5. The gift of Sivan's tribal ruler Zevulun was an ability to communicate with all peoples, not just his own kind. Communicating with clarity and integrity protects against damaging misunderstandings. Let truth be your shield during turbulent times!

ARIES / TALEH

You're due for a Divine Revelation at the Full Moon / Total Lunar Eclipse in Sagittarius on May 26, revealing contradictions, hypocrites, and shortcomings of leadership within your chosen religious community. Remember that God's way of having a relationship with you is through your relationships with others. May / Ma'adim trines Neptune / Rahav on May 31, empowering creative resolution of family issues raised by revelation of ancestral secrets. Tribal leader Yehuda knew how to speak truth to power; the dynamic and intense opposition of Mars to Pluto on June 4 is your own test of confronting power with your personal truth.

TAURUS / SHOR

Planetary ruler Venus / Noga's prescription for all manner of heartache is "show her the people you love with love," and it's your job to spread lovingkindness this month. Bind up the wounds of the broken-hearted when Venus settles Chiron on May 18, demonstrate maturity in love on May 19 at the trine of Venus to Saturn / Shabbtai. Discern between illusion and idealism on May 27 at the square of Venus to Neptune / Rahav; and hit the love jackpot on June 2 at the beneficent, magnanimous trine of Venus to Jupiter / Tzedek. Others are watching your example; set the highest standard.

GEMINI / TEOMIM

Planetary ruler Mercury / Kochav trined Saturn / Shabbtai on Rosh Chodesh Sivan with the Moon in Gemini, empowering meaningful musings, and sober decision-making. Through tribal leader Zevulun's spiritual work involves travel, this year the journey is more important than the destination. Mercury squares Neptune / Rahav on May 22, demanding clearheaded decision-making. Mercury conjuncts Venus / Noga and stations retrograde on May 29, reminding you that love can't be left behind in your rush to escape feelings of confinement. Mercury retrograde breaks his square to Neptune on June 5, asking you to review and reconfirm decisions made in May. Choose wisely.

CANCER / SARTAN

First Quarter Moon in Leo with Venus / Noga trine Saturn / Shabbtai May 19 reveals the promise of prosperity. Family matters take priority May 14-16; don't throw the baby out with the bathwater. Full "Super Blood" Moon / Total Lunar Eclipse May 26 gives your mind-body connection a serious wakeup call. Devote yourself to protecting and strengthening your health. Take tribal leader Reuven's example as an imperative to prioritize emotional well-being as part of a holistic approach to what ails you. Last Quarter Moon in Pisces with Venus entering Cancer on June 2 provides healing by unblocking creative channels.

LEO / ARYEH

"Make friends and influence people" on May 13 with Sun sextile Neptune / Rahav; your charm quotient is set on high. Sun trine Pluto with Moon in Leo on May 17 bestows tremendous charismatic powers of persuasion. Sun square Jupiter / Tzedek on May 21 enlarges your already generous nature. Sun sextiles Chiron and trines Saturn / Shabbtai June 23 making you unusually sensitive to the vulnerabilities of others. Tribal leader Shimon's life-lesson was using his power to safeguard the weak and defenseless;

your strength is a refuge to those in need, who once on their feet will never forget your protectiveness.

VIRGO / BETULAH

Mercury / Kochav in Gemini squares Neptune / Rahav in Pisces on May 22 and again during Mercury's retrograde on May 5. The square occurs again on July 5 with Mercury direct. Decisions about your home life and partnerships - whether deciding to keep, discard, or change them in some way - need to be made in an utterly clearheaded way, and this time period is not conducive to clarity. Mercury conjuncts Venus / Noga on May 29 at Mercury retrograde; if you've been holding back communication around important life-issues, they're sure to emerge now. Be utterly and ruthlessly honest with yourself before anyone else.

LIBRA / MOZNAVIM

Venus / Noga conjuncts the North Node on May 17, opening a feeling of freedom and spaciousness about your fate, future, and life trajectory you haven't felt in a long time. Suddenly you can see the forest for the trees, and make bold decisions which feel not simply right, but righteous. Full "Super Blood" Moon / Total Lunar Eclipse in Sagittarius on May 26 completes truth-telling for the sake of personal autonomy; speak your heart fearlessly. Venus enters sensitive Cancer on June 2 and trines Jupiter / Tzedek June 3, fantastic luck in the realm of business and career. Ask and you shall receive!

SCORPIO / AKHAV

The Sun's trine to Pluto on May 17 powerfully stimulates your personal charisma, and Mars trine Neptune/Rahav May 31 energizes your imagination. However, the big event this month is the opposition of your traditional and modern planetary rulers Mars / Ma'adim in Cancer opposite Pluto in Capricorn on June 5. Dynamic tension between your logical thoughts and emotion-driven beliefs, especially around issues of security, comes to a head. Confronting your own fears is one thing; surrendering them to the Divine Will is another. Discerning between facts and feelings is imperative; a trusted, sober-minded friend can help open the gates of perception.

SAGITTARIUS / KASHAT

Jupiter / Tzedek temporarily enters Pisces on May 13, going retrograde in June and then back into Aquarius in July. This brief sojourn previews Jupiter in Pisces during much of 2022. Spiritual wisdom, big-picture thinking, faith, and optimism are finally (after what seems like the longest drought) restored. The Full "Super Blood" Moon / Total Lunar Eclipse in Sagittarius on May 26 returns you to your roots in more ways than one. You've been here before, but not as you are now: accumulated wisdom, hard-won experience, deeper self-knowledge, and fire-tested faith are your biggest assets. Venus trine Jupiter June 3: Jackpot!

CAPRICORN / G'DI

With Saturn/Shabbtai retrograde beginning May 23 and the Full "Super Blood" Moon / Total Lunar Eclipse in Sagittarius on May 26, you'll be re-examining subconscious motivations behind recent lifestyle choices. If trauma triggers spurred these decisions, now is the time to unpack those long-repressed vulnerabilities and expose them to the light of consciousness to truly facilitate deep healing. Sun trine Saturn June 3, with Venus / Noga trine Jupiter / Tzedek. This empowers and supports safe space for you to cut the feelings behind your actions, with wisdom, maturity and self-care. Channel tribal leader Dan's fierce protectiveness around your own emotional well-being.

AQUARIUS / D'LI

Resistance to innovations you've initiated in the workplace come as a surprise, especially because your ideas are almost always for the greater good. Mercury/Kochav trines Saturn / Shabbtai on May 12, supporting clear communications; Venus/Noga trines Saturn on May 19, empowering sober realism, and accurate assessment of the state of intimate relationships. Practice exquisite integrity in all communications with your friends, community, and affinity groups at the Full "Super Blood" Moon / Total Lunar Eclipse on May 26. Saturn's retrograde from May 23 prompts you to cut the fat from your budget. Meticulous truth-telling, to yourself and others, saves you a world of hurt.

PISCES / DAGIM

Your "mazal" is truly "top" now: Jupiter/Tzedek's summer sojourn through Pisces beginning May 13 is a taste of his longer stay in your sign through much of 2022. Dreams and visions, imagination and curiosity, faith and optimism are making a long-awaited comeback, and not a moment too soon! Venus/Noga square Neptune/Rahav on May 27 and Mars/Ma'adim trine Neptune May 31, greatly energizing your creative flow. The big jackpot comes June 3 with a big, beautiful trine of Venus in Cancer to Jupiter in Pisces. Everything you touch can turn to gold; grace and favor are in your corner now. Enjoy!

The writer, an author and multimedia communicator, began her career as a professional astrologer in the 1980s. She holds a BA in Journalism from San Francisco State University and an MA in Jewish studies from Berkeley's Graduate Theological Union, where her thesis topic was astrology in Jewish cultural history. Find more of her work at astrolojew.com.