TOWN OF WOODSIDE MEMORANDUM

TO: MAYOR AND MEMBERS OF THE TOWN COUNCIL

FROM: KEVIN BRYANT, TOWN MANAGER

DATE: MARCH 28, 2023

RE: ITEM C: RESOLUTION TO BAN PESTICIDES ON TOWN-OWNED PROPERTY AND

DISCOURAGE THEIR USE AND SALE BY WOODSIDE RESIDENTS AND BUSINESSES

On November 17, 2022, the Environment: Open Space, Conservation & Sustainability Committee voted unanimously to recommend that the Town Council consider a resolution to ban the use of pesticides on Town-owned property and to discourage their use and sale by Woodside residents and business.

Attached are: (A) a Proposal to the Woodside Town Council to Adopt a Pesticide-Free Resolution and (B) a Draft Resolution.

Members of the Environment Committee will be at the March 28th Council meeting to present the Committee proposal and answer questions.

Proposal to Woodside Town Council to Adopt Pesticide-Free Resolution

Submitted by the Environment, Open Space, and Sustainability Committee

Introduction

Insecticides, herbicides, rodenticides and other poisons—collectively referred to as pesticides—have been proven to be a leading cause of death in wildlife in northern California, as well as a threat to human health. Give the Town of Woodside's historic support for wildlife, The Environment, Open Space and Sustainability Committee proposes that the Town of Woodside adopt a resolution banning all pesticides on city-owned property and discouraging their use and sale by Woodside residents and businesses, respectively. Nineteen northern California jurisdictions have adopted similar resolutions, including Portola Valley, Menlo Park, and Belmont.

Proposed Solution

The alternative to the use of pesticides is commonly referred to as Earth Friendly Management. Earth Friendly Management promotes problem-solving to champion pest prevention and landscape enrichment strategies that lead to healthy soil, plant life, wildlife, and structure protection.

Practices like Integrated Pest Management (which emphasizes natural prevention, monitoring and control of pests) and Organic Land Management are considered Earth Friendly Management if performed in the right way. The following principles are important elements in all such strategies and are practical alternatives to pesticide use.

- Repel: apply non-toxic repellants, such as garlic, castor oil, soap, or tabasco, to name a few
 examples. Traps can also be used as a way to eradicate pests that cannot be repelled.
- Exclude: seal possible entryways and ensure any wildlife attractants are removed and securely stored. It is important to note here that pests are attracted to garbage; appropriate local Dumpster Ordinances can help ensure that garbage is maintained in a fashion that does not invite pests.
- Deter: remove artificial food sources for wildlife and consider embracing the presence of
 predator species. To that end, the Environment, Open Space, and Sustainability Committee
 regularly hosts webinars and/or in-person talks to help Woodside community members
 learn more about living with predator species in our community. There are also resources
 available to community members on the Town website.

Effective and safe replacements for dangerous herbicides and insecticides are also available. For example, termite extermination can be done with orange oil, or less toxic chemical products such as Sentricon. The herbicides on this list can be replaced with a host of DIY or commercial organic weed killers that use vinegar, essential oils, and/or herbicidal soaps.

Adoption of the proposed resolution would have implications for the Town, local businesses and residents, and the Environment, Open Space, and Sustainability Committee, as follows:

- The Town would NOT need to make changes to any landscape management products currently in use. After reviewing the list of products used as of March 2022, the Environment, Open Space, and Sustainability Committee deemed them to be safe. The resolution would, however, prevent the ability of Town contractors to switch to poisonbased products in the future.
- The resolution would encourage (but not require) that pesticides be phased out by local businesses and residents.
- The Environment, Open Space, and Sustainability Committee would be responsible for outreach to local businesses and residents, informing them of the example set by the Town and helping them to learn about potential alternatives. This outreach would be conducted through flyers, events, and additional information on the website.

Pesticide Summary & Impacts

There are many types of pesticides, with varying effects on animal and human health. While many insecticides and herbicides have been shown to have negative health impacts, rodenticides have been proven to be the most harmful.

There are two types of rodenticides: anticoagulant and non-anticoagulant. Blood anticoagulant rodenticides cause internal bleeding and hemorrhaging which ultimately is fatal in rats and mice.

Anticoagulant rodenticides have been shown to be the most lethal to carnivorous animal populations, including mountain lions, coyotes bobcats, foxes, raptors, and fishers. Anticoagulant rodenticides can be either second generation or first generation. Second generation anticoagulant rodenticides are the most advanced and dangerous poisons. They kill very gradually, so rodents continue eating them after they've already ingested a lethal dose. By the time the rodent dies, its body contains multiple times the lethal dose and can therefore be deadly to predators, scavengers, and pets. First generation anticoagulant rodenticides are less potent but are deadly if ingested more than once by a rodent, which is common. While non-anticoagulant rodenticides are less severe, they still pose serious dangers to the wildlife ecosystem and are especially dangerous to pets since they are easily ingested and have no antidotes.

The EPA has published the Risk Mitigation Decision for Ten Rodenticides, ¹ which includes both first and second generation anticoagulant rodenticides and non-anticoagulant rodenticides. This report summarizes the 2008 EPA decision that all rodenticide bait products be limited to bait stations to reduce risk to children, and also puts in place measures to prevent general consumers from purchasing bait products containing the ten rodenticides that pose the greatest risk to wildlife. However, because of the proven negative effects of all types of pesticides, the Environment, Open Space and Sustainability Committee proposes that the pesticide-free resolution cover not only these rodenticides, but also insecticides and herbicides.

Wildlife can be exposed to pesticides through either direct or indirect ingestion. In other words, wildlife like bees, birds or small mammals may ingest the pesticide directly, while large carnivorous species

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¹ Rodenticides Final Risk Mitigation Decision; Notice of Availability. The Federal Register. June 4, 2008. https://www.federalregister.gov/documents/2008/06/04/E8-12493/rodenticides-final-risk-mitigation-decision-notice-of-availability

typically only ingest it via their prey. In exposed animals, pesticide exposure is linked to cancer, endocrine disruption, reproductive effects, neurotoxicity, kidney and liver damage, birth defects, and developmental and behavioral changes. Exposure to poisons also increase the likelihood that animals will die from other diseases, such as mange. Because pesticides have negative effects throughout the food chain, including bees, pollinators, and other beneficial organisms—and on local water quality—they cause harm to the entire ecosystem. A demonstration of how poison spreads throughout ecosystem is included in the figure below.

Raptors Owls Fisher Weasel Reptiles Raccoon Reptiles Gray Fox

"Rodent Poisons Are Passed Up The Food Chain"

In California countless studies have been conducted that show the detrimental effects of rodenticides on predatory species in particular. Together, these studies have demonstrated that the vast majority of predators have been exposed to pesticides, but also that increased pesticide exposure is linked to decreased survival rate (the percentage of individuals that live from one year to the next) and therefore decreased animal populations. Here are a few of the findings our committee finds the most compelling; note that this is not an exhaustive list.

- Of 252 mountain lions tested for poisons between 2016 and 2018 in 37 California counties, 96% had been exposed to one or more poisons and 72% to 3 or more poisons.²
- Since 2012, eight California mountain lions have been documented as dying directly from
 poison exposure. These mountain lions were all found to have been exposed to five to six
 different anticoagulant rodent poisons, including both first generation and second
 generation varieties. Some of these animals were discovered by hikers, and most made local
 news. Many other mountain lions have likely died from poison exposure (based on exposure
 levels shown in the first bullet above), but were not found or tested.

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² "An Investigation of Anticoagulant Rodenticide Data Submitted to the Department of Pesticide Regulation." Department of Pesticide Regulation, Pesticide Registration Branch. November 16, 2018. https://www.cdpr.ca.gov/docs/registration/reevaluation/2018 investigation anticoagulant.pdf

- The Mid-Peninsula Open Space District linked the illness and death of many bobcats found in its preserves to second generation anticoagulant rodenticides³
- Bobcats have been completely eradicated from the Conejo Valley in southern California due to increased vulnerability to the deadly disease mange, which is commonly linked to pesticide exposure.⁴
- Of 195 bobcats tested in five southern California counties, first generation anticoagulant pesticides were found in 77% of the individuals.⁵
- As of 2010, 92% of raptors (owls and hawks) collected in San Diego County and 79% collected in the Central Valley contained anticoagulant rodenticides.⁶
- In a 2014 study of 68 kit foxes texted near Bakersfield, 74% were exposed to anticoagulant rodenticides. This is particularly disappointing because kit foxes are listed on the federal Endangered Species list and as threatened in California.⁷

Beyond the demonstrated detrimental effects on wildlife, pesticides have also been shown to be harmful to humans (particularly children, elderly, and individuals with health problems) and pets. It is estimated that 10,000 children per year are accidentally exposed to mouse and rat baits.⁸ There is a wide range of effects to human and pet health of exposure to pesticides, from mild symptoms like eye and skin irritation or vomiting and diarrhea, to severe symptoms like increased risk of cancer, birth defects, and even death (from ingesting zinc phosphide, for example).

Regional Examples

Pesticide-free resolutions have been passed in eighteen northern California jurisdictions: Albany, Belmont, Berkeley, Brisbane, Davis, El Cerrito, Emeryville, Fairfax, Foster City, Humboldt County, Marin County, Menlo Park, Portola Valley, Richmond, San Anselmo, San Francisco (City and County), Santa Cruz County.

Conclusion

In conclusion, the Environment, Open Space, and Sustainability Committee asks that the Town Council consider adopting a pesticide-free resolution. The primary drivers for such a resolution are the proven fatal impact that high pesticide exposure can have on wildlife; the negative impacts of pesticides on human health; and the availability of alternative strategies to repel, exclude, and deter pests. We hope

³ https://www.openspace.org/what-we-do/projects/integrated-pest-management?utm_campaign=E-News&utm_medium=email&_hsmi=232438337&_hsenc=p2ANqtz-9RNAhP8PZqYijs0qFMdU0glwSjXsk3XWSBjU1vZhZwTzMhrFHjot6pmttwylVsvb-qoCVQ5MePutl8KocHwxkLP6gvew&utm_content=232438337&utm_source=hs_email#rodenticides

⁴ Riley SPD, Boydston EE, Crooks KR, Lyre, LM. In book *Urban Carnivores* edited by SD Gehrt, SPD Riley, BL Cypher. Baltimore, MD: The Johns Hopkins University Press. pp. 121-138 (2010).

⁵ Serieys, Laurel E.K., Mathew S. Rogan, Stephani S. Matushima, and Christopher C. Wilmers. "Road-crossings, vegetative covr, land use and poisons interact to influence corridor effectiveness." Biological Conservation, Volume 253. January 2021, 108930. https://www.sciencedirect.com/science/article/abs/pii/S0006320720309885

⁶Lima, L.L., and Salmon, T.P. "Assessing some potential environmental impacts from agricultural anticoagulant uses." Proceedings of the Vertebrate Pest Conference 24:199-203 (2010).

⁷ https://poisonfreemalibu.org/rodent-poisons/#poisoned-animals

⁸ McClure, Robert. "Rat Poisons Endanger 10,000 Children Every Year in the U.S." Environmental Health news. December 14, 2010. https://www.scientificamerican.com/article/rat-poisons-endanger-10000-children/

the resolution will communicate the urgency of the pesticide threat; urge businesses to no longer sell pesticides; urge property owners to cease purchasing and using pesticides and/or to encourage their professional landscape management companies to do so; and commits the Town to avoiding pesticide use in perpetuity. The Environment, Open Space, and Sustainability will take responsibility for outreach and engagement efforts following resolution adoption.

Attachment 1: List of proposed banned products

Organized by pesticide type

Insecticides

Chlorpyrifos

- Chlorpyrifos is an organophosphate insecticide, acaricide and miticide used primarily to control foliage and soil-borne insect pests.
- All use on food crops was banned by the EPA as of Feb, 2022 due to excessive risks to pregnant women and children, including long-term harm to children s brain function, including loss of IQ and impaired working memory. Non-agricultural, non-food uses are unaffected by this rule, but will be considered as EPA completes its registration review of this chemical.¹
- A draft biological evaluation by the Environmental Protection Agency found that chlorpyrifos is likely to adversely affect" 97 percent of all threatened and endangered wildlife, including more than 100 listed bird species.²
- o Example product brands: Lorsban® and Dursban® from Corteva™ Agriscience

Naphthalene

- The chemical naphthalene is an effective pesticide found in mothballs and other pest control products. Its strong odor also makes it a pest repellant.
- Animal studies have suggested that naphthalene can cause cancer. The International Agency for Research on Cancer (IARC) of the World Health Organization (WHO) concluded that naphthalene is possibly carcinogenic to humans. The U.S. EPA classified naphthalene as a possible human carcinogen, also based on animal studies³
- In humans, women who ate naphthalene mothballs or inhaled the vapors while pregnant gave birth to babies with hemolytic anemia. Naphthalene is also considered moderately toxic to several species of fish, water fleas, and Pacific oysters.⁴
- Mothballs are hazardous to young children. Mothballs can easily be mistaken for candy, or simply tempt young children to touch and play with them.

Herbicides

Atrazine

- Atrazine is a chlorinated triazine systemic herbicide that is used to selectively control annual grasses and broadleaf weeds before they emerge. Pesticide products containing atrazine are registered for use on several agricultural crops, with the highest use on field corn, sweet corn, sorghum, and sugarcane.
- Atrazine is a widespread pollutant of groundwater and drinking water, has been linked to increased risk of cancer and endocrine and reproductive problems in people. The EPA

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ATTACHMENT A1

¹ <u>https://www.epa.gov/newsreleases/epa-takes-next-step-keep-chlorpyrifos-out-food-protecting-farmworkers-and-childrens</u>

² https://www.epa.gov/endangered-species/biological-evaluation-chapters-chlorpyrifos-esa-assessment

³ https://www.epa.gov/sites/default/files/2016-09/documents/naphthalene.pdf

⁴ http://npic.orst.edu/factsheets/naphgen.html

also reports that, "Based on the results from hundreds of toxicity studies on the effects of atrazine on plants and animals, over 20 years of surface water monitoring data, and higher tier aquatic exposure models, this risk assessment concludes that aquatic plant communities are impacted in many areas where atrazine use is heaviest, and there is potential chronic risk to fish, amphibians, and aquatic invertebrates in these same locations^{5,6}

Atrazine is the active ingredient in dozens of consumer pesticide products

Clopyralid

- Clopyralid is a toxic persistent herbicide used to control broadleaf weeds on lawns and turf, range, pastures, right-of ways, and on several crops.
- Clopyralid has low toxicity if individuals accidentally eat, touch, or inhale residues and is considered relatively non-toxic to bees
- Clopyralid causes environmental and property damage through drift, runoff, use of treated plant material (such as straw or grass clippings) for mulch or compost, contaminated irrigation water, and urine or manure from animals consuming treated vegetation.
- Example product brands: Stinger, Transline, Reclaim, Curtail, Confront, Clopyr AG, Lontrel, Millennium Ultra, Millenium Ultra Plus and Redeem

Glyphosate

- Glyphosate is a widely used herbicide that can kill certain weeds and grasses.

 Glyphosate works by blocking an enzyme essential for plant growth. The product is used primarily in agriculture, but also in forestry and lawn and garden care.
- Products containing glyphosate may cause eye or skin irritation. People who breathed in spray mist from products containing glyphosate felt irritation in their nose and throat.
 Swallowing products with glyphosate can cause increased saliva, burns in the mouth and throat, nausea, vomiting, and diarrhea.
- People may also be exposed to glyphosate through the food they eat. Many farmers use glyphosate products in their fields and orchards. It is used on GMO and non-GMA crops and gets into foods early in the food chain, before raw food is harvested and before it s processed.
- Cancer: The <u>U.S. Environmental Protection Agency (EPA) says</u> there s no evidence that glyphosate causes cancer in humans." The European Food Safety Authority <u>agrees</u>. The World Health Organization s (WHO) International Agency for Research on Cancer, however, stated in 2015 that glyphosate is probably carcinogenic to humans."⁷
- Example product brand: Roundup

Picloram

- Picloram is a systemic herbicide used for general woody plant control. It also controls a wide range of broad-leaved weeds, but most grasses are resistant.
- Picloram is not thought to be carcinogenic, but does cause eye and skin irritation. It is chemically very stable, so can be passed through animal feces to non-target plants.
- No picloram products are registered for homeowner use or have residential applications.
- Example product brand: Tordon

⁵ https://www.regulations.gov/document/EPA-HQ-OPP-2013-0266-0315

⁶ https://www.panna.org/resources/atrazine

⁷ https://www.iarc.who.int/featured-news/media-centre-iarc-news-glyphosate/

• Triclopyr

- Triclopyr TEA and BEE products are used as selective herbicides to control broad leaf weeds and brush on a variety of sites-- rights-of-way, pasture and rangelands, forests, rice, and turf, including home lawns
- Triclopyr has low toxicity if individuals accidentally eat, touch, or inhale residues.
 Triclopyr is slightly irritating to the eyes, nonirritating to the skin, and causes skin sensitization.
- Triclopyr acid was found to be slightly toxic to birds and practically non- toxic to mammals, insects, freshwater fish and invertebrates⁸
- Example product brands: Access, Crossbow, ET, Garlon, Grazon, PathFinder, Redeem, Rely, Remedy, and Turflon

• 2,4-D

- 2,4-D controls broadleaf weeds and is the most widely used herbicide in the world. It is
 used in many places including turf, lawns, rights-of-way, aquatic sites, forestry sites, and
 a variety of field, fruit and vegetable crops. It may also be used to regulate the growth of
 citrus plants.
- Pure 2,4-D is low in toxicity if eaten, inhaled, or if it contacts the skin, and some forms are low in toxicity to the eyes. However, the acid and salt forms of 2,4-D can cause severe eye irritation. People who drank products containing 2,4-D vomited, had diarrhea, headaches, and were confused or aggressive⁹
- 2,4-D generally has moderate toxicity to birds and mammals, is slightly toxic to fish and aquatic invertebrates, and is practically nontoxic to honeybees
- o Example product brands: Trimec, Triplet, End Run, and Q4 Plus

Rodenticides

Anticoagulant

Second generation

Brodifacoum

- Covered by EPA Risk Mitigation Decision for Ten Rodenticides
- Brodifacoum works by preventing the clotting of blood by decreasing
 Vitamin K levels in the blood
- It was registered as a pesticide in 1979 in the United States although in 2008 it was made a restricted use pesticide by the Environmental Protection Agency
- Structurally it is similar to warfarin, but it is many times more potent, with the ability to cause severe bleeding in humans¹⁰
- Species of raptors which include owls, bald eagles, golden eagles, falcons, buzzards, and hawks, seem to be a group that are vastly affected by secondary poisoning due to brodifacoum¹¹
- Example product brands: d-CON, Rattex, Talon

Bromadiolone

• Covered by EPA Risk Mitigation Decision for Ten Rodenticides

⁸ https://www3.epa.gov/pesticides/chem_search/reg_actions/reregistration/fs_G-82_1-Oct-98.pdf

⁹ http://npic.orst.edu/factsheets/24Dgen.html

¹⁰ https://mmsl.cz/pdfs/mms/2013/01/03.pdf

¹¹ https://duquark.com/2019/12/23/secondary-poisoning-and-ecological-effects-of-anticoagulant-rodenticides/

- Bromadiolone works by preventing the blood from clotting
- To reduce the risk of accidental poisonings of children and wildlife, bromadiolone products are only intended for sale to professionals.
 Most applications also require the use of a bait station to discourage access
- Bromadiolone can be highly toxic to humans and most mammals and birds, and is moderately to highly toxic to fish and other aquatic life¹²
- Example product brands: Resolv, Kaput Doom, Wilco soft bait

Difethialone

- Covered by EPA Risk Mitigation Decision for Ten Rodenticides
- Similar in mechanism to Bromadiolone and Brodifacoum
- High risk of secondary poisoning to birds and non-target mammals¹³
- Example product brands: Assasin, Contrax-D, Ditrac, and Eagles 7 Final Bit

Difenacoum

- Covered by EPA Risk Mitigation Decision for Ten Rodenticides
- Similar in mechanism to Difethiolone, Bromadiolone and Brodifacoum
- Risk to wild animals and birds who eat this chemical directly, also high secondary risk to birds and non-target mammals who eat poisoned prey animals.¹⁴
- Example product brand: Victor V Multi-kill

First generation

Chlorophacinone

- Chlorophacinone is an anticoagulant rodenticide used to control rats, mice, voles, and other wild rodents. It is formulated as ready-to-use baits based on whole, cracked, or milled grain
- Covered by EPA Risk Mitigation Decision for Ten Rodenticides
- Example product brands: Mouse Killer, Flatline, Final

Diphacinone

- Diphacinone is most commonly used as a dry rodenticide bait to control common rodent pests, such as rats and mice.
- Covered by EPA Risk Mitigation Decision for Ten Rodenticides
- Similar in toxicity to Chlorphacinone
- Example product brands: Ramik Mouser, Ramik Green, Motomco Tomcat

Warfarin

- In addition to its use as a blood anticoagulant to kill rodents, Warfarin is also used to prevent blood clots from forming or growing larger in your blood and blood vessels
- Covered by EPA Risk Mitigation Decision for Ten Rodenticides
- Warfarin was used widely as a rodenticide, but today its use is declining as many rodents have grown resistant to it.
- Example product brand: Kaput Rat and Mouse Bait

¹² http://npic.orst.edu/factsheets/bromadgen.html

¹³ http://npic.orst.edu/factsheets/rodenticides.html

¹⁴ https://www3.epa.gov/pesticides/chem_search/reg_actions/registration/fs_PC-011901_01-Sep-07.pdf

• Non-anticoagulant

Bromethalin

- Bromethalin is not an anticoagulant but is a highly potent rodenticide that provides a lethal dose to rodents in a single feeding. Death occurs within 24 to 36 hours after ingestion
- Covered by EPA Risk Mitigation Decision for Ten Rodenticides
- Because only small amounts are needed to kill a rodent, a predator is unlikely to be harmed by consuming a bromethalin-poisoned rodent. This is good news for owls, hawks, and other rat-consuming wildlife. For dogs and cats, however, this is only a small advantage as pets commonly consume the insecticide directly. Bromethalin has no antidote and bromethalin products are readily palatable to dogs and cats.
- With anticoagulant rodenticides becoming less available, bromethalin has captured the home rat poison market and has created a new hazard for pets to contend with.
- Example product brands: Fastrac Blox, Fastrac Pellets, and Talpirid Mole Bait

Cholecalciferol

- Rodenticides containing cholecalciferol (vitamin D₃) are emerging as a popular consumer choice for eliminating rats and mice resistant to anticoagulant rodenticides. Ingestion of cholecalciferol rodenticides by dogs and cats can result in death.
- Covered by EPA Risk Mitigation Decision for Ten Rodenticides
- Example product brands: Quintox, True Grit Rampage, and Ortho Rat-B-Gone

Zinc phosphide

- Zinc phosphide is only used as a rodenticide. It is made into bait that will attract the pest, such as gophers, ground squirrels, or field mice. There are over 80 products containing zinc phosphide registered for use in the United States.
- Zinc phosphide is highly toxic in acute exposure to humans. It may be consumed accidentally or intentionally as means of suicidal or homicidal acts. Other routes of entry into the body could be via inhalation or through the skin. Zinc phosphide is hydrolysed by the gastric acid and is transformed into phosphine gas.
- Covered by EPA Risk Mitigation Decision for Ten Rodenticides
- Example product brand: Prozap Mole and Gopher

Molluscicide

Sodium Ferric EDTA

- Sodium Ferric EDTA is a broad-spectrum molluscicide and the active ingredient in Slug & Snail Killer. The end-use product is a pelleted bait intended for use as a molluscicide in agricultural, nursery, greenhouse, and home and garden applications.
- No risks to humans or the environment are expected when pesticide products containing pelargonic acid are used according to the label directions.
- Low toxicity to dogs, and much safer than metaldehyde
- Example product brand: Corry's Slug & Snail Killer

Metaldehyde

- Metaldehyde is an ingredient in slug and snail killers. It is considered highly toxic to pets and other mammals and will be banned in the UK in 2023.
- Metaldehyde can affect you when breathed in. Contact can irritate the skin and eyes.
 Metaldehyde can cause nausea, vomiting, diarrhea and abdominal pain. Exposure to
 Metaldehyde can cause irritability, sleepiness, fever, muscle twitching, convulsions,
 coma, and death.
- Dogs, cats, birds, and other wildlife can all be affected by metaldehyde. Metaldehyde may cause signs of poisoning even when very small amounts are ingested.
- Example product brands: Southern Ag Slug and Snail Bait, Deadline Slug & Snail Slayer.

Broad Spectrum

• Methyl Bromide

- Methyl bromide is an odorless, colorless gas used to control a wide variety of pests in agriculture and shipping, including fungi, weeds, insects, nematodes (or roundworms), and rodents.
- It has been banned in the US due to toxicity and damage to the ozone layer. Exception are made for Critical uses and Quarantine and pre-shipment uses.
- In California, it was long used by strawberry growers but was phased out at the end of 2016, holding out until then by using the Critical Use exemption.
- Example product brands: Brom-o-Gas, Bromomethane, Celfume, Embafume, Haltox, MB, MeBr, Methogas, Profume, Terr-o-Gas, and Zytox

Sulfuryl Fluoride (also a rodenticide)

- Sulfuryl fluoride is a structural and commodity fumigant used to control a wide variety
 of pests, including termites, powder post beetles, old house borers, bedbugs, carpet
 beetles, moths, cockroaches, rats and mice
- It is a restricted-use pesticide, meaning it can only be used by a certified applicator or someone under the certified applicator s direct supervision.
- Sulfuryl Fluoride can cause nausea, vomiting, diarrhea, abdominal pain and loss of appetite. Repeated high exposure can cause weakness, muscle twitching, seizures and convulsions. Sulfuryl Fluoride may damage the liver and kidneys.
- Sulfuryl fluoride has replaced many uses of methyl bromide. Methyl bromide is classified as a Class I Ozone Depleting Substance" by the EPA.
- Example product brand: Vikane Gas Fumigant

RESOLUTION NO. 2023 -

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF WOODSIDE BANNING PESTICIDES ON TOWN-OWNED PROPERTY AND DISCOURAGING THEIR USE AND SALE BY WOODSIDE RESIDENTS AND BUSINESSES

WHEREAS, there is significant evidence illustrating the harmful and often fatal impacts of pesticides on wildlife; and

WHEREAS, there is scientific proof of the harmful health impacts of pesticides on children, the elderly, and other at-risk populations and pets; and

WHEREAS, there are safer and equally effective alternatives to pesticide use for pest control; and

WHEREAS, the Town of Woodside currently uses pesticide-free solutions on Town properties; and

WHEREAS, several other San Mateo County jurisdictions have adopted similar resolutions, including Portola Valley, Menlo Park, and Belmont.

NOW, THEREFORE, IT IS HEREBY RESOLVED, that the Town Council of the Town of Woodside:

- 1. Urges Woodside businesses to discontinue the sale of all pesticides;
- 2. Urges Woodside residents to avoid buying and utilizing pesticides and bait products, and instead use safer and more effective integrated pest management to control the pest population; and
- 3. Commits to use pesticide-free methods of rodent control on all Town properties.

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Passed and adopted by the Town Council of the Town of Woodside, California, at a meeting thereof held on the $28^{\rm th}$ day of March, 2023, by the following vote of the members thereof:

AYES, and in favor thereof, Councilmembers: NOES, Councilmembers:
ABSENT, Councilmembers:

Mayor of the Town of Woodside

ATTEST:

ABSTAIN, Councilmembers: