A BILL FOR AN ACT

RELATING TO ENVIRONMENTAL PROTECTION.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

- 1 SECTION 1. The legislature finds that pollinators,
- 2 including honeybees, are a vital part of agricultural production
- 3 in the State. In Hawaii, pollinators are critical to valuable
- 4 specialty crops, including melons, watermelons, cucumbers,
- 5 squash, lychee, mango, macadamia nuts, coffee beans, eggplant,
- 6 avocado, guava, herbs, and some flowering plants, such as
- 7 sunflowers. In 2007, the department of agriculture estimated
- 8 that nearly seventy per cent of the State's food crops depend on
- 9 pollination by bees. In North America, one-third of the food
- 10 produced depends on pollination by bees, including nearly
- 11 ninety-five varieties of fruits and other foods of high
- 12 nutritional value.
- 13 Scientists have linked the use of systemic neonicotinoid
- 14 insecticides to the rapid decline of honeybees and other
- 15 pollinators and to the deterioration of pollinator health. This
- 16 class of insecticides damages the central nervous system of
- 17 insects, causing tremors, paralysis, and death at very low

- 1 doses. Systemic insecticides are absorbed into treated plants
- 2 and distributed throughout their vascular systems. As a result,
- 3 treating a plant or coating a seed with neonicotinoids can
- 4 render parts of the plant, including the roots, leaves, stems,
- 5 flowers, nectar, pollen, and guttation fluid, toxic to insects.
- 6 The insecticides are persistent in soil and easily transported
- 7 via air, dust, and water. In addition to the acute lethal
- 8 effects, neonicotinoid insecticides cause sub-lethal effects,
- 9 including impaired foraging and feeding behavior,
- 10 disorientation, weakened immunity, delayed larval development,
- 11 and increased susceptibility to viruses, diseases, and
- 12 parasites. The toxins also kill or weaken beneficial
- 13 invertebrates, birds, and other wildlife, through direct and
- 14 indirect effects.
- 15 Hawaii boasts a variety of native pollinators, including
- 16 honeycreeper birds, Hawaiian yellow-faced bees, and the
- 17 Kamehameha butterfly. Unfortunately, these iconic species are
- 18 in peril. Native bees, beneficial insects of all kinds, and
- 19 food chains of aquatic invertebrates, insects, birds, bats, and
- 20 other pollinators in Hawaii are at risk from environmental
- 21 contamination by highly-persistent neonicotinoids. Twenty

- 1 species of honeycreepers are already extinct. In 2016, the
- 2 United States Fish and Wildlife Service added the following
- 3 seven species of Hawaiian yellow-faced bees to the federal lists
- 4 of endangered and threatened wildlife and plants: Hylaeus
- 5 anthracinus, Hylaeus longiceps, Hylaeus assimulans, Hylaeus
- 6 facilis, Hylaeus hilaris, Hylaeus kuakea, and Hylaeus mana.
- 7 These native bee species are at even greater risk from the use
- 8 of neonicotinoid insecticides.
- 9 Scientists have also found that seeds coated in
- 10 neonicotinoids are harmful to birds. The consumption of a
- 11 single corn kernel coated with a neonicotinoid can kill a
- 12 medium-sized songbird. In 2013, the European Union voted to
- 13 suspend the use of three major neonicotinoids—imidacloprid,
- 14 clothianidin, and thiamethoxam—on certain agricultural crops
- 15 pending a review of their safety. States in this country have
- 16 also restricted some neonicotinoid uses to address their risks.
- 17 In 2015, the United States Environmental Protection Agency
- 18 announced a moratorium on approvals for new outdoor uses of
- 19 neonicotinoids. Since January 2016, the United States Fish and
- 20 Wildlife Service has prohibited uses of neonicotinoid pesticides

- 1 in agricultural practices within the National Wildlife Refuge
- 2 System.
- 3 The legislature also finds that glyphosate is a broad-
- 4 spectrum herbicide, meaning the herbicide kills many varieties
- 5 of green vegetation and is widely used in agricultural,
- 6 residential, aquatic, and other settings. In fact, glyphosate
- 7 is the most widely used herbicide globally and within the United
- 8 States due to the widespread cultivation of "Roundup Ready"
- 9 crops, i.e., crops that have been genetically engineered to
- 10 withstand its application. Because of glyphosate's intensive
- 11 and extensive use, it is regularly found in food, the air,
- 12 rainfall, and surface waters. The increased use of glyphosate
- 13 in genetically engineered agriculture has resulted in the rapid
- 14 development and proliferation of previously unknown herbicide
- 15 tolerant superweeds. As more crops are genetically engineered
- 16 to resist glyphosate, glyphosate use and resistance in weeds
- 17 both increase. Superweeds threaten to overtake the habitat of
- 18 native flora and fauna in uncultivated lands and force farmers
- 19 and land managers to use increasingly toxic and expensive
- 20 herbicides, which further exacerbate the environmental and
- 21 health-related impacts of the herbicide.

1 Increased use of glyphosate-based herbicides with 2 glyphosate-resistant crops has substantial environmental 3 impacts, including reduced biodiversity, the loss of milkweed, a 4 plant that the monarch butterfly relies on which has caused a 5 steady decline in monarch butterfly populations, and potential 6 impacts to water and aquatic life, such as amphibians. 7 In 2015, the International Agency for Research on Cancer, a 8 division of the World Health Organization and the world's 9 leading authority on cancer, unanimously concluded that 10 glyphosate is a probable carcinogen. The International Agency 11 for Research on Cancer's determination was based on a rigorous assessment that concluded that there is sufficient evidence of 12 13 carcinogenicity in experimental animals. 14 In light of glyphosate's proven environmental and human 15 health risks, many jurisdictions have moved to restrict its use. **16** For example, at least two municipalities in California have **17** banned the use of glyphosate herbicides from use on public lands 18 within their localities. These municipalities have found 19 organic alternatives to glyphosate, such as "avenger," to be 20 effective. California has also proposed listing glyphosate as a 21 possible carcinogen under the state's Safe Drinking Water and

- 1 Toxic Enforcement Act of 1986 (Proposition 65), which requires
- 2 California to publish chemicals known to cause cancer or birth
- 3 defects or other reproductive harm. Finally, in 2016, the
- 4 European Commission, the executive body of the European Union,
- 5 made a series of recommendations to restrict the use of
- 6 glyphosate while the European Chemical Agency concludes its
- 7 review of the chemical. One of the recommendations calls for
- 8 minimizing the use of glyphosate herbicides in public parks,
- 9 public playgrounds, and gardens.
- 10 The purpose of this Act is to defend and protect Hawaii's
- 11 public health, agricultural economy, and natural ecosystems by
- 12 restricting the exposure of:
- 13 (1) Hawaii's honeybees, native bees, insects, birds, and
- other pollinators to neonicotinoid insecticides; and
- 15 (2) Hawaii's residents, plants, animals, and natural
- 16 resources to glyphosate herbicides.
- 17 SECTION 2. Section 149A-2, Hawaii Revised Statutes, is
- 18 amended by adding two new definitions to be appropriately
- 19 inserted and to read as follows:
- 20 ""Glyphosate" or "glyphosate herbicides" includes all
- 21 herbicides that contain glyphosate as one of the active



1	ingredients and tank mixes of herbicides containing glyphosate						
2	as one of the active ingredients.						
3	"Neonicotinoid insecticides" means a class of systemic						
4	pesticides with a common mode of action that affects the central						
5	nervous system of insects that includes the following active						
6	ingredients: acetamiprid, clothianidin, dinoteluran,						
7	imidacloprid, thiamethoxam, or other new neonicotinoid						
8	insecticides as specified by the department pursuant to rule."						
9	SECTION 3. Section 149A-31, Hawaii Revised Statutes, is						
10	amended to read as follows:						
11	"§149A-31 Prohibited acts. No person shall:						
12	(1) Use any pesticide in a manner inconsistent with its						
13	label, except that it shall not be unlawful to:						
14	(A) Apply a pesticide at any dosage, concentration,						
15	or frequency less than that specified on the						
16	label or labeling; provided that the efficacy of						
17	the pesticide is maintained and further provided						
18	that, when a pesticide is applied by a commercial						
19	applicator, the deviation from the label						
20	recommendations must be with the consent of the						
21	purchaser of the pesticide application services;						

1		(B)	Apply a pesticide against any target pest not
2			specified in the labeling if the application is
3			to a crop, animal, or site specified on the label
4			or labeling; provided that the label or labeling
5			does not specifically prohibit the use on pests
6			other than those listed on the label or labeling;
7		(C)	Employ any method of application not prohibited
8			by the labeling;
9		(D)	Mix a pesticide or pesticides with a fertilizer
10			when such mixture is not prohibited by the label
11			or labeling; or
12		(E)	Use in a manner determined by rule not to be an
13			unlawful act;
14	(2)	Use,	store, transport, or discard any pesticide or
15		pest	icide container in any manner which would have
16		unre	asonable adverse effects on the environment;
17	(3)	Use	or apply restricted use pesticides unless the
18		pers	on is a certified pesticide applicator or under
19		the	direct supervision of a certified pesticide
20		appl	icator with a valid certificate issued pursuant to
21		rule	es adopted under section 149A-33(1): provided that

1		it shall be prohibited to use or apply a restricted
2		use pesticide for structural pest control uses for a
3		fee or trading of services, unless the user or
4		applicator is a pest control operator or is employed
5		by a pest control operator licensed under chapter
6		460J;
7	(4)	Use or apply pesticides in any manner that has been
8		suspended, canceled, or restricted pursuant to section
9		149A-32.5;
10	(5)	Falsify any record or report required to be made or
11		maintained by rules adopted pursuant to this chapter;
12		[or]
13	(6)	Fill with water, through a hose, pipe, or other
14		similar transmission system, any tank, implement,
15		apparatus, or equipment used to disperse pesticides,
16		unless the tank, implement, apparatus, equipment,
17		hose, pipe, or other similar transmission system is
18		equipped with an air gap or a reduced-pressure
19		principle backflow device meeting the requirements
20		under section 340E-2 and the rules adopted
21		[thereunder.]; or

1	<u>(7)</u>	(7) After December 31, 2020, apply any neonicotinoid						
2		insecticide or glyphosate herbicide, including the						
3		planting of any seed or plant pretreated with any						
4		neonicotinoid insecticide, on any public land owned or						
5		maintained by the State without a:						
6		<u>(A)</u>	Licer	nse issued by the State or any agency of the				
7			fede	ral government to conduct neonicotinoid				
8			insec	cticide research; or				
9		(B)	Permi	it issued by the State to apply any				
10			neon	icotinoid insecticide or glyphosate herbicide				
11			becai	ise:				
12			<u>(i)</u>	The situation poses an immediate threat to				
13				human health and the environment; and				
14			<u>(ii)</u>	There is no viable alternative to the use of				
15				the proposed neonicotinoid insecticide or				
16				glyphosate herbicide."				
17	SECT	'ION 4	. If	any provision of this Act, or the				
18	applicati	on th	ereof	to any person or circumstance, is held				
19	invalid,	the i	nvalio	dity does not affect other provisions or				
20	applicati	ons o	f the	Act that can be given effect without the				



- 1 invalid provision or application, and to this end the provisions
- 2 of this Act are severable.
- 3 SECTION 5. Statutory material to be repealed is bracketed
- 4 and stricken. New statutory material is underscored.
- 5 SECTION 6. This Act shall take effect upon its approval.

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INTRODUCED BY:

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JAN 2 4 2018

Report Title:

Environmental Protection; Neonicotinoid Insecticides; Glyphosate Herbicides; Public Lands; Prohibitions

Description:

Prohibits the application of neonicotinoid insecticides and glyphosate herbicides after December 31, 2020, without a license or permit issued by the State on State public lands under certain conditions.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.