A Comparative Analysis of State Pollinator Protection Laws

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ABSTRACT

Various states in the U.S. have passed laws to regulate pesticide use for agriculture and prohibit excessive harm to pollinators. However, current online public information on pollinator protection laws in America is largely lacking. This study establishes an inventory of the state legislation that has banned neonicotinoid pesticides and protected pollinators. The results of this review indicate that only sixteen states have enacted neonicotinoid bans, none of which are complete bans. Sixteen states had no portion of their agricultural website dedicated to pollinator conservation and did not address bees or pollinators at all except when referencing pest control. These same states had no legislation or ban on neonicotinoids. In sixteen states neonicotinoids are labeled as restricted use, however, finding information on neonicotinoid regulation and defining restricted use was difficult. Overall, there is a lack of clarity and consistency across state legislation. There are inconsistent policies across the U.S., but the states that have more progressive policies also are more conscious of the environment and conservation. The implementation of federal legislation would be most effective at unifying the states and creating widespread pollinator conservation.

Keywords: Pollinators, Neonicotinoids, Bees, Policy, Conservation, Pesticides

INTRODUCTION

Bee Population Decline and Neonicotinoid Regulation in America

In recent years native bee and honeybee populations have declined significantly due to habitat loss and fragmentation, pesticide use, reduced genetic diversity, and climate change. Bee populations in the U.S. decreased by more than 60% over a fifteen-year period (47). Bees

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Received August 28, 2024; **Accepted** September 17, 2024 https://doi.org/10.70251/HYJR2348.236174

are essential to many ecosystems and to human wellbeing. Honeybees are the most well-known pollinators worldwide, and their mobility makes them critical to the success of agriculture when native bees are not present. The western honeybee (Apis mellifera) is recognized as the most frequent floral visitor of crops worldwide (47). Due to their prevalence in terrestrial ecosystems and their role in crop pollination, western honeybees have been the focus of protective environmental legislation. However, native bees have also experienced significant population declines and should also benefit from conservation efforts (52). Recent research conducted by Cornell University suggests that native bees are better pollinators than honeybees and that they are not as prone to colony collapse disorder (49). Native bee health is heavily dependent on soil health, which can be threatened by the increased use of neonicotinoids and other pesticides. Bees play a significant role in the health of the environment and the success of agriculture. Pollination is crucial for maintaining the quality and quantity of many agricultural products, contributing to their overall economic value. According to the U.S. Food and Drug Administration (FDA), honeybees produce around one third of the food eaten by Americans. The pollination they provide results in higher crop yields, increased genetic diversity of plants, and better-quality fruits and vegetables with higher nutritional content.

The increased use of neonicotinoids globally has been a driving force behind bee population decline. In the U.S., no federal legislation prohibits or controls the use of neonicotinoids. Certain states have enacted more stringent laws to protect pollinators. Certain states have enacted complete bans while others have less restrictive regulation. Educational initiatives such as state-driven awareness campaigns and dedicated pollinator conservation website pages have also begun to generate positive change for bee conservation.

Purpose of this Research

This study aims to build an inventory of state pollinator protection initiatives and regulations. Few recent studies have evaluated the differences and changes in each state's pollinator protection laws. Gathering data on which states are leading the effort to create the most change can reveal areas of the country where progress is being made. A comparative analysis evaluates each state in terms of its neonicotinoid bans, agricultural website, and educational resources on pollinators. This study strives to answer the question, "How do pollinator protection laws and initiatives vary in each state?"

LITERATURE REVIEW

Neonicotinoids

Neonicotinoids, sometimes referred to as "neonics," are a class of synthetic, neurotoxic insecticides that are used on crops. They are relatively non-toxic to humans and are effective at exterminating and controlling the populations of a wide range of pests. They have become the most widely used group of insecticides globally (53). Neonicotinoids are considered a systemic insecticide. This means that it contaminates the nectar, pollen, leaves, and fruit of a plant. They can be applied as a coating on a plant seed, around a plant's roots, or directly to the soil. In developed countries, neonicotinoids are primarily used on crops such as oilseed rape, sunflower, cereals, beets, and

potatoes. Imidacloprid, clothianidin, and thiamethoxam are the most commonly used neonicotinoids for these crops (53).

Recent research has demonstrated the environmental harm neonicotinoids cause. Due to their water solubility and frequent use, they are now found in soil and water samples throughout the country. Plants only absorb a small portion of the chemical upon application. The chemicals that are not taken up by the plant's tissue can drift off the targeted site. They can leach into groundwater and soil or be taken up by other plants. These chemicals can persist in the environment for long periods of time, and they are toxic to pollinators, beneficial insects, and aquatic invertebrates. Bees can access contaminated water or chemical spray can drift directly onto them. Bees can also take contaminated pollen or nectar from flowering plants to a hive and potentially contaminate other bees, further exacerbating the impact on neighboring populations. Moreover, over 70% of native bees are ground nesting. They are therefore more susceptible to harm from neonicotinoids, especially when they are applied as a soil drench. Even in small quantities, neonicotinoids can cause damage to a bee's nervous system, impairing their foraging abilities and functioning (53). The continued use of neonicotinoids has negatively impacted biodiversity, food production, and has likely exacerbated bee population decline.

Neonicotinoid Management and Regulation in the U.S.

In the U.S. today, insecticide use—including the use of neonicotinoids—is largely managed by state-level agricultural departments, the United States Department of Agriculture (USDA), and the U.S. Environmental Protection Agency (EPA). The EPA regulates pesticides by mandating legal limits and enforcing labeling requirements primarily under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Food Quality Protection Act (FQPA). The EPA also conducts scientific research to better understand the effects pesticides have on pollinators. According to the FIFRA, before a pesticide is sold or distributed it must be licensed by the EPA and labeled to show central information clearly. The applicant must also show that it "will not generally cause unreasonable adverse effects on the environment." An "unreasonable adverse effect" is defined by FIFRA as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide" or "any human dietary risk from residues that result from use of a pesticide in or on any food inconsistent with the standard under section 408 of the Federal Food, Drug, and Cosmetic Act." Additionally, pesticides are classified as either "restricted use" or general use. "Restricted use" pesticides are pesticides that require special handling or application due to their potential risk to human health or the environment.

In 2013, the Center for Food Safety filed a lawsuit against the EPA for failing to regulate crop seeds coated with neonicotinoids. The seeds did not have enforceable labels on their packaging and were not adequately assessed for the environmental harm they may have caused to endangered species and pollinators. In 2019, the registrations of twelve of these neonicotinoid-containing products were canceled and the lawsuit was settled (48). This attempt to potentially shape federal legislation failed, but it can be used to inform future legislation. Advocacy groups and non-profit organizations including the Center for Food Safety have brought more attention and awareness to the issue on a national level. By holding the EPA and the government accountable, these groups can potentially instigate change.

Federal decision makers are taking steps to protect pollinators. For instance, the U.S. Fish and Wildlife Service eliminated the use of neonicotinoids on National Wildlife Refuges lands in January 2016. Additionally, in January of 2020 the EPA issued an interim decision on five neonicotinoid pesticides. The agency aimed to further restrict their use while allowing them to remain on the market. In the projected interim decisions, the EPA proposed:

"management measures to help keep pesticides on the intended target and reduce the amount used on crops associated with potential ecological risks, requiring the use of additional personal protective equipment to address potential occupational risks, restrictions on when pesticides can be applied to blooming crops in order to limit exposure to bees, language on the label that advises homeowners not to use neonicotinoid products, and canceling spray uses of imidacloprid on residential turf due to health concerns."

The EPA's legal cases for neonicotinoids are still pending, but they have since dedicated their efforts to reviewing the pesticides, completing risk assessments, and practicing risk mitigation. In 2017, the EPA implemented a policy to protect bees from agricultural pesticide spray and dust applications while the bees are under contract to provide pollination services. However,

they still recommend that states implement their own pollinator protection plans and best management practices to further limit the harm done to pollinators. Overall, federal regulations focus primarily on the approval and registration of pesticides based on their efficiency and safety rather than on the environmental effects.

State-Level Neonicotinoid Regulation

In response to neonicotinoid use and the lack of standard regulation across the nation, various states have adopted their own regulatory measures to protect pollinators and restrict neonicotinoid use. Certain states have enacted complete bans, while others have more specific restrictions regarding the application of pesticides on certain plants or in certain locations. In many states, the labeling of pesticides as "restricted use" is the most prohibitive measure.

There is limited research assessing the success of state-level neonicotinoid regulations, but the existing studies agree that state-level action can counteract reductions in pollinator populations. States with legislation banning neonicotinoid use have experienced slower rates of bee population decline in comparison to states that only follow federal regulations (52). State-level regulation can address pesticide use and pollinator protection in a more active way to minimize the negative effects of pesticide application.

Non-Pesticide Approaches to Pollinator Conservation

Aside from implementing legislation banning pesticides to protect pollinators, various states have initiated several other efforts to promote pollinator conservation. States have specialized advocacy and research groups, educational campaigns, and habitat protection. In terms of state pollinator protection within agriculture, honeybees and native bees benefit from best management practices such as low tillage, riparian buffers, and habitat conservation. Certain states have also taken a more general approach to pollinator conservation by creating dedicated websites for pollinator conservation that provide online resources for farmers and licensed pesticide applicators. Educational proposals and resources that are derived from state governments can typically be found on agricultural department websites. These approaches can generate public support and awareness with the goal of leading to more legislation and conservation.

Summary

Based on the literature, the increased use of neonicotinoid pesticides worldwide is likely exacerbating

bee population decline. While they are effective at controlling pest populations for agriculture, neonicotinoids can harm bees due to their toxic properties. Although there are other drivers of bee declines neonicotinoids are toxic to bees. In America, neonicotinoid regulation is largely managed by the EPA. While the EPA encourages various bee-friendly practices and has a few general pesticide regulations there remains a lack of standard neonicotinoid regulation across the country. Several states have put forth their own regulatory measures to protect pollinators and restrict neonicotinoid use, ranging from complete bans in certain contexts to less restrictive regulations. Certain states have also adopted non-pesticide-related forms of pollinator conservation including dedicated website pages for educational proposals and resources.

METHOD

To study the pollinator protection laws in each state, a comparative analysis was conducted. The objective of this method is to compare and evaluate the progress and shortcomings of each state by identifying their similarities and differences in terms of pollinator protection.

Procedures and Data Analysis

The comparative analysis method used for this study can be broken into several primary steps: selection, description, classification, and juxtaposition. The analysis method of this study was initiated once I elected to evaluate the 50 U.S. states. The comparative analysis method was chosen for this study because it is most efficient at evaluating several components and comparing them according to criteria. Four primary questions were created to aptly assess the pollinator protection laws and initiatives of each state: 1) To what extent are neonicotinoids banned?; 2) Do they have a dedicated page for pollinator conservation on their agricultural department/state government website?; 3) Are pesticides labeled as "restricted use"?; and 4) Are neonicotinoids labeled as "restricted use"? I analyzed each

state government website and state agricultural website and assessed their procedures to answer each question. A description of each state's pollinator protection status was noted in a chart. Once the initiatives of each state were described, I classified if they did or did not meet the conditions of the four questions. Lastly, each state was coded by categorizing the extent to which neonicotinoids are banned. Each website was reviewed, and key terms were found to gather information. After an evaluation of every state was conducted, I found patterns in the data and observed contrasts.

RESULTS & DISCUSSION

Data Collection and Analysis

Each state was evaluated, and the data collected was organized into an Excel spreadsheet. The first column contained all the state names. The five other columns addressed each state's coded category of neonicotinoid ban, the findings to the four classifying questions, and the websites where the information was found. Each state had a designated row within the Excel spreadsheet. The complete excel spreadsheet can be found in Appendix A.

Comparative Analysis

Out of the 50 states, only 16 have enacted neonicotinoid bans. 34 states have not enacted any form of neonicotinoid regulation (Table 1). Across the 50 states, there have not been any complete bans. The existing neonicotinoid legislation in the states has either banned agricultural use (with exemptions), banned consumer use, or restricted agricultural use. Most of the bans enacted have addressed consumer use, except for licensed use or agriculture. Five states have enacted bans for consumer use and restricted agriculture. Oregon is the only which has entirely banned agricultural use (aside from certain exceptions). Overall, while most states do not currently have legislation banning neonicotinoids, it is important to recognize that the states with regulations have various nuanced restrictions and

 Table 1. Number of Current States with Neonicotinoid Legislation

Status of Current States with Neonicotinoid Legislation	
Banned agricultural use with exceptions	1
Banned consumer use and restricted agricultural use	5
Banned consumer use, except for licensed use or agriculture	10
No ban on neonicotinoids	34
Total	50

exemptions to the proposed application of the insecticide.

A majority of the states have other bee conservation initiatives run by their own government. Various state agricultural department websites had a page dedicated to pollinator conservation or educational resources. Practically every state had a page for bees, but they did not all address the significance of bees or the ways the state protects them. Many states had a page dedicated to a pollinator protection plan which detailed various distinct practices the state claims to follow. Sixteen states had no portion of their agricultural website dedicated to pollinator conservation and did not address bees or pollinators at all except when referencing pest control. These same states had no legislation or ban on neonicotinoids.

In all states, pesticides are labeled as "restricted use" to some extent. Only sixteen of the fifty states label neonicotinoids as "restricted use." Overall, finding information on neonicotinoid regulation and defining restricted use was difficult due to a lack of clarity and consistency across state legislation. In many states, bills claim that bees must be "considered" before application, however, the ways in which they are to be considered is not mentioned. Other states claim that neonicotinoid insecticides may be used "when appropriate" or "under certain circumstances," but they do not establish the confines of what viable use is. Furthermore, each state has its own exceptions, exemptions, or exclusions. An exception is an action or entity that is excluded from a general statement or does not follow a rule. The language of these regulations is ambiguous aside from exceptions for certain areas which are more direct. It is likely that the lack of standardization and unclear language can lead to misinterpretations. Additionally, most information on pollinator protection laws cannot be found in one place on state government websites. Some states had information on neonicotinoid regulation on the agricultural page of their state legislature websites. Other states had pest control on a designated page or on an entirely different portion of their website. In terms of the provided educational resources, many states had dedicated pages to a pollinator protection plan or the significance of bees. Other state educational resources on pollinator protection could only be found in the website search engine or were on a separate website.

According to the data, Alabama can be considered one of the least restrictive states for neonicotinoids and the least protective state for pollinators. There is no mention of neonicotinoids within their pesticide act. Their prohibited acts include "Any pesticide which contains any substance or substances in quantities highly toxic

to man" and "To hold or offer for sale, sell or distribute to the user any restricted-use pesticide or device without a license." Other than fundamental restrictions such as these, neonicotinoids are permitted for all uses. Their agricultural website does not mention pollinators or a pollinator protection plan and does not include any educational resources.

New York is likely one of the most progressive states in terms of pollinator protection and the restriction of neonicotinoids. Taking effect on January 1, 2022, the Bees and Birds Protection Actaims to prohibit the following: "For any person to use any pesticide containing Neonicotinoids ("neonics"), including but not limited to acetamiprid, clothianidin, imidacloprid, nitenpyram, nithiazine, thiacloprid, and thiamethoxam." The language of this bill is more definitive than that of other states and does not include any exceptions aside from the neonicotinoids not mentioned (which are permitted for outdoor agricultural use only). During the transition to a no-pesticide approach the state government gave the agricultural community time to adjust. This support sets up farmers to have the most success. This extensive neonicotinoid restriction is not New York's only effort in place to protect pollinators. The state agricultural website has an in-depth pollinator protection plan and includes an educational resource that explains the significance of pollinators. The state plans to further restrict neonicotinoid usage through an act that will take effect in 2027. The implementation of neonicotinoid restriction and pollinator protection in this state is likely attributed to various factors. Most critically public pressure and environmental advocacy significantly contributed to this state's realization. Advocacy and conservation groups have been successful at endorsing policy action. New York's transition aligns with actions taken by other states that also aim to protect pollinators. It seems that the states with the most environmental awareness and desire to foster a thriving ecosystem are most effective at realizing state legislation.

Oregon is also an interesting state in terms of its neonicotinoid ban status. It currently is the only state with an active neonicotinoid ban for agriculture (with exemptions). States have restricted agricultural neonicotinoid use, however, Oregon is the only state that seems to have a definitive ban. The Oregon Department of Agriculture (ODA) was primarily responsible for the transition away from neonics. ODA recognized bumble bee deaths related to the application of dinotefuran or imidacloprid (types of neonicotinoids). To protect pollinators ODA launched a temporary rule in which these neonicotinoids were banned. When farmers transitioned

to thiamethoxam or clothianidin (two different types of neonicotinoids) the same bee deaths were noted and these types of neonicotinoids were banned entirely. The observations of ODA likely initiated the beginning of this ban. Oregon has established education resources to further inform farmers about the significance of removing these pesticides.

Overall, these findings demonstrate that there are inconsistent policies across the U.S., but the states that have more progressive policies also are more conscious of the environment and conservation. Aside from a lack of awareness or a lack of desire to help bee populations, many states have not been successful at supporting laws for pollinator conservation. This may be due to insufficient alternative pest control methods. In the absence of neonicotinoids there needs to be more of a push for extension resources and non-pesticide approaches. A potential solution to this could be funding and education. Federal and local support for non-pesticide approaches like integrated pest management (IPM) or cultural control methods could increase the success of farmers. Instead of spraying, methods such as insect exclusion netting, trapping, or biological controls could be used to reduce the quantity of unwanted pests on crops. A study conducted by Cornell University observed that insect exclusion netting has been successful at reducing or eliminating insect pest damage. The spotted wing drosophila bug is typically very destructive to berry crops. Cornell University found that the introduction of insect netting reduced crop damage significantly and that 100% exclusion can be achieved if the nets are maintained properly. They also claim that while there is a chance insects may get inside the nets, it is not very common with the proper care. This is only one of many examples of the success alternative pest-control methods. Furthermore, farmer education on these cultural controls and creating comprehensive food production strategies could increase awareness and reduce pesticide use.

CONCLUSION

This study observed the pollinator protection laws of each state and focused on neonicotinoid regulation. The evaluation of the U.S. revealed that only sixteen states have enacted neonicotinoid bans and none of them are complete bans. Sixteen states had no portion of their agricultural website dedicated to pollinator conservation and did not address bees or pollinators at all except when referencing pest control. These same states had no legislation or ban on neonicotinoids. In sixteen states neonicotinoids are labeled as restricted use, however, finding information on

neonicotinoid regulation and defining restricted use was difficult. Overall, there is a lack of clarity and consistency across state legislation. This updated inventory is important because it provides a greater understanding of which states are leading the country in terms of pollinator protection and which states have not launched pollinator protection laws and initiatives. If governments want to support these bans, then they must set farmers up for success. Policy incentives or support systems such as funding and education would facilitate the transition away from neonicotinoids and further protect pollinator populations. Lastly, while state-level regulation is extremely significant in terms of protecting pollinators, the implementation of federal legislation would be most effective at unifying the states and creating widespread pollinator conservation.

Limitations

Although the present research clearly demonstrates how pollinator protection laws and initiatives vary in each state, it is important to recognize several potential limitations. There are various limitations of the comparative analysis method. Studies employing this method are susceptible to oversimplification and the misappropriation of findings across different contexts. It was difficult to compare states because they each had different climates and needs. Each state had vastly different agricultural practices and pesticide use patterns due to variations in pests and crops. Certain states were more vulnerable to pests which would require a more intensive pest prevention plan and potentially involve the use of more pesticides. Additionally, at the time of this writing, various laws will be reviewed on July 1, 2024. New laws may have been passed in certain states and the information presented in this study may no longer be considered up to date. After conducting data cleanup, I may have incorrectly coded certain laws due to misinterpretation or a lack of clarity on the bill being analyzed. Lastly, when gathering the data on the internet, I may have overlooked certain laws that potentially would alter the findings of the study. However, due to the objective nature of this study, the results from this analysis should be considered reliable.

Implications and Future Research

Despite these limitations, the results of this study suggest several theoretical and practical implications for the existing field of policy and pollinator conservation. The widespread use of neonicotinoids has instigated various negative consequences. In response to the harmful effects on bees and pollinators, certain states

have enacted legislation to restrict or eliminate the use of insecticides. The introduction of state legislation is a significant milestone in addressing these concerns and can potentially restore the health of bee populations. Identifying which states have established regulations and are leading the effort to create the most change, can reveal areas of the country where progress is being made. This understanding not only helps in identifying successful strategies and policies but also indicates which states are behind in terms of pollinator protection.

Future research should continue to evaluate the impacts of neonicotinoid regulation on pollinator health, agriculture, and the wider implications for pesticide policy in the United States. Studies in the future could gather inventories of pollinator protection laws in other countries and examine if they have successfully maintained the health of their populations. In Europe, agricultural practices have practically eliminated pesticides which would be a helpful research topic to understand how various pesticide-free approaches are successful. Studies could also analyze regions within states because comparing agricultural practices in areas with similar climates would be significantly easier. Restricting the area of research would also allow researchers to understand the specific bee populations in areas and how large their populations are. If a smaller scale study of this nature was conducted it could reveal ways each state could best target and prevent the use of pesticides. Understanding which forms of regulation are effective can inform how other countries approach pollinator protection. Additionally, future studies could focus on pesticides other than neonicotinoids that harm pollinators. More studies must be conducted on this type of policy to facilitate improvement and change. This type of research is extremely relevant to the current climate, as conservation efforts can be driven by public support and legislation, and they are essential to the rehabilitation of bees and many other species.

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Appendix A

State	Categories	To what extent are neonicotinoids banned?	Page for pollinator conservation on their state AG website?	Are pesticides labeled as "restricted use"?	Are neonicotinoids labeled as "restricted use"?
Alabama	No ban on neonicotinoids	Not banned	No	Yes	No
Alaska	No ban on neonicotinoids	Not banned	No	Yes	No
Arizona	No ban on neonicotinoids	Not banned	No	Yes	No
Arkansas	No ban on neonicotinoids	Not banned	No	Yes	No
California	Banned consumer use, except for liscensed use or agriculture	Banned for consumer use, only licensed use for agriculture AB 363 California Neonicotinoid Risk Determination-effective 1/1/2024	Yes	Yes	Yes
Colorado	Banned consumer use, except for liscensed use or agriculture	Banned for consumer use, only licensed use for agriculture SB 23-266 Neonic Pesticides as Limited-Use Pesticides -effective 7/1/2024	Yes	Yes	No
Connecticut	Banned consumer use, except for liscensed use or agriculture	Banned for consumer use, only licnsed use for agriculture SB 190 Act Concerning the Use of Neonicotinoids - effective 3/8/2024	Yes	Yes	Yes
Delaware	Banned consumer use, except for liscensed use or agriculture	Banned retail sale for outdoor applications, best management practices to limit neonic escaping target SB 264 Delaware Code Relating to Pesticides - effective 7/1/2024	Yes	Yes	Yes
Florida	No ban on neonicotinoids	Not banned	Yes	Yes	No
Georgia	No ban on neonicotinoids	Not banned	Yes	Yes	No
Hawail	No ban on neonicotinoids	Not banned	No	Yes	Yes
Idaho	No ban on neonicotinoids	Not banned	No	Yes	No

State	Categories	To what extent are neonicotinoids banned?	Page for pollinator conservation on their state AG website?	Are pesticides labeled as "restricted use"?	Are neonicotinoids labeled as "restricted use"?
Illinois	Banned consumer use, except for liscensed use or agriculture	Only viable use in structural pest control or abatement of non-native insect borers, subject to specified restrictions SB 187 Illinois Pesticide Act - effective 7/1/2024	Yes	Yes	No
Indiana	No ban on neonicotinoids	Not banned	Yes	Yes	No
Iowa	No ban on neonicotinoids	Not banned	No	Yes	No
Kansas	No ban on neonicotinoids	Not banned	No	Yes	No
Kentucky	No ban on neonicotinoids	Not banned	Yes	Yes	No
Louisiana	No ban on neonicotinoids	Not banned	No	Yes	No
Maine	Banned consumer use and restricted agricultural use	Bans consumer use, only viable for wood preservation, pest control, use on pets, treatment of structure foundations HB 155 Neonicotinoids for Outdoor Residential Use-effective 6/10/2021	Yes	Yes	Yes
Maryland	Banned consumer use, except for liscensed use or agriculture	First state to ban consumer use, only licensed use for agriculture SB 383 Neonicotinoid Pesticides - effective 1/1/2018	Yes	Yes	Yes
Massachusetts	Banned consumer use, except for liscensed use or agriculture	Banned for consumer use, only licensed use for agriculture HB 763 An Act to protect Massachusetts pollinators -effective 7/1/2022	Yes	Yes	Yes
Michigan	No ban on neonicotinoids	Not banned	Yes	Yes	No
Minnesota	Banned consumer use and restricted agricultural use	Prohibiting the use of neonicotinoid plants and pesticide products on the Capitol Complex, unless no other suitable product is available EO 19-28 Minnesota Pollinator Populations- effective 4/5/2019	Yes	Yes	Yes

State	Categories	To what extent are neonicotinoids banned?	Page for pollinator conservation on their state AG website?	Are pesticides labeled as "restricted use"?	Are neonicotinoids labeled as "restricted use"?
Mississippi	No ban on neonicotinoids	Not banned	No	Yes	No
Missouri	No ban on neonicotinoids	Not banned	No	Yes	No
Montana	No ban on neonicotinoids	Not banned	Yes	Yes	No
Nebraska	No ban on neonicotinoids	Not banned	No	Yes	No
Nevada	Banned consumer use and restricted agricultural use	Banned non-agricultural use AB 162 Neonicotinoid Regulation-effective 1/1/2024	Yes	Yes	No
New Hampshire	Banned consumer use, except for liscensed use or agriculture	Banned for consumer use, only licensed use for agriculture New Hampshire Pesticide Control - effective 6/12/2023	Yes	Yes	Yes
New Jersey	Banned consumer use, except for liscensed use or agriculture	Banned for consumer use, only licensed use for agriculture SB 1016 Neonicotinoid Pesticide Restriction- effective 10/31/2023	Yes	Yes	Yes
New Mexico	No ban on neonicotinoids	Not banned	No	Yes	No
New York	Banned consumer use and restricted agricultural use	Banned use and sale of neonics SB S1856A Bees and Birds Protection Act-effective 1/1/2027	Yes	Yes	Yes
North Carolina	No ban on neonicotinoids	Not banned	Yes	Yes	No
North Dakota	No ban on neonicotinoids	Not banned	Yes	Yes	No
Ohio	No ban on neonicotinoids	Not banned	No	Yes	No
Oklahoma	No ban on neonicotinoids	Not banned	Yes	Yes	No
Oregon	Banned agricultural use with exemptions	Banned agricultural use with exempted situations HB 2589 Neonicotinoid Ban - effective 2015	Yes	Yes	Yes
Pennsylvania	No ban on neonicotinoids	Not banned	Yes	Yes	Yes

State	Categories	To what extent are neonicotinoids banned?	Page for pollinator conservation on their state AG website?	Are pesticides labeled as "restricted use"?	Are neonicotinoids labeled as "restricted use"?
Rhode Island	No ban on neonicotinoids	Restricted use outdoors, licensed applicators only H 7129 Pesticide Control - effective 1/1/2024	Yes	Yes	Yes
South Carolina	No ban on neonicotinoids	Not banned	No	Yes	No
South Dakota	No ban on neonicotinoids	Not banned	Yes	Yes	No
Tennessee	No ban on neonicotinoids	Not banned	Yes	Yes	No
Texas	No ban on neonicotinoids	Not banned	No	Yes	No
Utah	No ban on neonicotinoids	Not banned	Yes	Yes	No
Vermont	Banned consumer use and restricted agricultural use	Prohibited use, future bill will ban use and sale of neonicotinoid seeds, bill passed to completely ban - effective 2029 H 706 Neonicotinoid Pesticides - effective 7/1/2025	Yes	Yes	Yes
Virginia	No ban on neonicotinoids	Not banned	Yes	Yes	No
Washington	Banned consumer use, except for liscensed use or agriculture	Prohibited residential use SB 5972 Neonicotinoid Insecticides- effective 6/6/2024	Yes	Yes	Yes
West Virginia	No ban on neonicotinoids	Restricted agricultural use HB 4722 West Virginia Pesticide Control Act- effective 1/1/2023	Yes	Yes	No
Wisconsin	No ban on neonicotinoids	Not banned	Yes	Yes	No
Wyoming	No ban on neonicotinoids	Not banned	Yes	Yes	No