American Bird Conservancy * Beyond Pesticides * Center for Biological Diversity
Friends of the Earth * Haereticus Environmental Laboratory
Northwest Center for Alternatives to Pesticides (NCAP) * Pesticide Action Network
Raptors Are The Solution (RATS) * Researchers Implementing Conservation Action
Rodenticide Free Project * TEDX - The Endocrine Disruption Exchange
The Xerces Society for Invertebrate Conservation

7 March 2014

Steven Bradbury
Director, Office of Pesticide Programs
OPP Docket
Environmental Protection Agency Docket Center
EPA/DC 28221T
1200 Pennsylvania Ave. NW
Washington, DC 20460-0001

Subject: Migratory Bird Treaty Act: Memorandum of Understanding

Dear Dr. Bradbury,

Thank you for the opportunity to review the draft Memorandum of Understanding (MOU) between the Environmental Protection Agency Office of Pesticide Programs (OPP) and the Department of the Interior, U.S. Fish and Wildlife Service (FWS) regarding implementation of Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds," docket identification number EPA-HQ-OPP-2013-0744.

The Migratory Bird Treaty Act is a criminal statute to protect roughly 1000 species of birds. The treaty applies to the federal government via Executive Order 13186, which directs federal agencies to develop MOUs with FWS to promote the conservation of migratory bird populations. The executive order also calls for the establishment of a Council for the Conservation of Migratory Birds.

We are submitting these comments on behalf of American Bird Conservancy (ABC) and our partner organizations Beyond Pesticides, Center for Biological Diversity, Friends of the Earth, Haereticus Environmental Laboratory, Northwest Center for Alternatives to Pesticides (NCAP), Pesticide Action Network, Raptors Are The Solution (RATS), Researchers Implementing Conservation Action, Rodenticide Free Project, TEDX - The Endocrine Disruption Exchange and The Xerces Society for Invertebrate Conservation.

We applaud the EPA OPP and the FWS for focusing the spotlight on migratory bird conservation. This is a critically important area of work, especially given the significant reduction in songbird populations in recent decades [see, e.g., *The State of the Birds*, 2013. http://www.stateofthebirds.org]; the documented links between toxic pesticides and grassland bird declines [Mineau and Whiteside, 2013. *Pesticide Acute Toxicity Is a Better Correlate of U.S. Grassland Bird Declines than Agricultural*

Intensification http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0057457]; the ongoing poisonings of raptors, pets, and children from anticoagulant rodenticides [*EPA Statement of Reasons and Factual Basis for Notice of Intent to Cancel Registrations for…Certain Rodenticide Bait Products,* 2013. http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2013-0049-0003], and the widespread bird mortality associated with the nation's most-used insecticides, neonicotinoids [Mineau and Palmer, 2013. *The Impact of the Nation's Most Widely Used Insecticides on Birds* http://www.abcbirds.org/abcprograms/policy/toxins/Neonic_FINAL.pdf].

The EPA/FWS MOU represents a formidable package of initiatives which promise improved outcomes for birds and for human health as well. We appreciate the attention to incident monitoring systems and -- a critical component in that effort -- the development of bioassays and other diagnostic techniques to determine the cause of death in poisoned birds. The creation of more transparent and collaborative information systems will help ensure that registration decisions are better calibrated to pesticide risks and benefits. We are also encouraged by the interest in improving pesticide labeling, and we provide two examples of new labels that fail to protect birds and other non-target species. We applaud the increased attention to research on safe and effective alternatives to rodenticides and on the development of humane avian control systems. We also support research into the chronic, reproductive, and immune system effects of pesticides on birds and on primary food sources such as aquatic and terrestrial invertebrates. Finally, we are grateful for any efforts that can be made to protect migratory birds from over-wintering hazards beyond US borders.

Ultimately the critical question is whether EPA and FWS can deliver on the measures proposed in the MOU. The MOU does not impose legally-binding requirements and is merely intended as "internal procedural guidance" to agency staff. Moreover, the draft resolutions are prefaced with phrases such as "subject to the availability of appropriations," "within administration budgetary limits," and "to the extent practicable." We recognize that inflation-adjusted EPA budgets are now lower than in 1978, and that under FIFRA a large amount of OPP's limited resources are funneled into procedural protections for companies fighting EPA health and safety decisions. The most extreme case involves Reckitt Benckiser, the manufacturer of French's Mustard, Lysol, Woolite and other products. This $37 billion multinational conglomerate continues to market formulations of "d-CON" rodenticide that cause fatal hemorrhaging in Bald Eagles, hawks, and other wildlife, and that harm children, pet cats, and dogs. EPA has conducted a painstaking and meticulous evaluation of these products for over a decade, and one year ago the agency announced its intent to cancel 12 d-CON products. By spurning the EPA directive, Reckitt Benckiser is forcing the EPA to spend vast sums of taxpayer dollars in a multi-year legal challenge. Though not illegal, the company's delay tactics are an enormous drain on agency resources and taxpayer dollars, with tragic consequences for raptors, pets and children.

Given the d-CON case and other claims on limited agency dollars, it is unclear to what extent OPP's renewed focus on migratory bird conservation will translate into concrete on-the-ground advances. That said, we are impressed by the thoughtful ideas and collaborative spirit in the draft MOU, and we are hopeful that it will lead to robust improvements for wildlife and for people. American Bird Conservancy and partners are standing by and ready to help advance these initiatives wherever possible.

Incident Reporting (MOU sections E(3), E(4)(a) and F(2)(a))

Much of the proposed MOU focuses on data, consistent with the mission of the Council for the Conservation of Migratory Birds to "identify…potential voids in bird conservation data repositories" that can be useful "when evaluating proposed actions that may impact birds." The MOU represents an

enormous opportunity to strengthen the EPA incident reporting system; to build bridges with FWS and other federal entities; to create a more transparent incident reporting system so that the public no longer has to submit FOIA requests for bird necropsy reports; to institute a more robust and accessible information portal for submission of incident data for birds and other wildlife; and to begin a process for integrating the incident record-keeping resources of federal entities, international partners, state and county agencies, non-governmental organizations, veterinarians, animal rescue facilities, and the private sector. This data can be extremely useful both in informing pesticide registration review decisions and in educating end-users.

OPP data collection on migratory birds is an area in dire need of an upgrade, as the limitations of current reporting requirements and the lack of enforcement seriously hamstring the agency's ability to gauge likely avian mortality when re-registering pesticide products. The draft MOU (Section F(2)(a)) touts the EPA's reporting requirements under FIFRA Section 6(a)(2):

> "FIFRA 6(a)(2) requirements stipulate that known adverse effects related to a pesticide, including pesticide ecological incidents, must be reported to OPP by the registrant of the pesticide (i.e., pesticide companies are required by law to report known pesticide incidents involving their pesticide active ingredient(s) to OPP).

Unfortunately in practice these 6(a)(2) requirements are sorely deficient. FIFRA 6(a)(2) requires registrants to report only those bird incidents involving at least 200 of a so-called "flocking species," 50 songbirds, or five of a predatory species. [http://www.epa.gov/fedrgstr/EPA-PEST/1997/September/Day-19/p24937.htm]. Where there are fewer identified carcasses, only the most minimalist aggregate reporting applies. Setting the threshold at which reporting requirements kick in to such large numbers of dead birds means that very few incidents get reported. It is time to repeal these unrealistic reporting thresholds, which were instituted in the 1997 final rule codifying EPA's interpretation of the FIFRA 6(a)(2) reporting requirements. The fact is that even though large numbers of birds are killed by pesticides, it is rare to find carcasses of 200 "flocking" birds, 50 songbirds, or five raptors – all of a single species -- all at once. Most bird losses are diffuse and go undetected – they are difficult to spot and they readily decompose amidst the debris of farm fields and forests. Given the enormous scale on which some pesticides are used, the poisoning of even a few breeding songbirds per acre can amount to a large yearly kill. [See, e.g., Mineau 2004. *Birds and Pesticides: Are Pesticide Regulatory Decisions Consistent with the Protection Afforded Migratory Bird Species Under the Migratory Bird Treaty Act?* William & Mary Environmental Law and Policy Review. http://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1152&context=wmelpr]. And yet such data would not meet the reporting threshold under FIFRA section 6(a)(2) requirements.

Given the deficiencies in OPP's FIFRA 6(a)(2) reporting requirements for pesticide-related bird kills, and the Migratory Bird Council's interest in identifying and addressing "potential voids in bird data repositories," the migratory bird MOU seems like a perfect opportunity for EPA to upgrade its incident reporting requirements for birds.

The EPA, of course, is just one federal entity among many. What incident tracking systems may be found in FWS? Is the information centralized or dispersed in field offices? What about DOE, DOD, NOAA, NPS or other federal agencies? And what coordination exists with incident reporting in Canada or in Europe? To integrate the incident reporting functions of EPA and FWS is an important first step, but imagine the wealth of information available if EPA data were pooled with that captured by other federal entities and even by other governments.

Beyond the federal government, many states, counties, veterinary hospitals and animal rescue facilities, poison-control hotlines, and non-governmental agencies collect incident data on birds and other wildlife. This information gets tucked away in myriad file drawers, Excel spreadsheets, and cloud-based apps, but it appears there is no mechanism in place to bring it all together in a consistent manner, assure QA/QC by licensed test facilities, and share the information within and beyond OPP. One way to get this process moving would be to survey a broad cross-section of data collection entities and then to bring together key players to develop the most effective and efficient means of integrating the many diverse sources of incident data. We would be happy to help facilitate such an exchange.

Few people know what to do when they find dead birds or other wildlife. The National Pesticide Information Center (NPIC) provides a web portal for reporting ecological incidents, but most people have never heard of it. Those who stumble upon the NPIC website use it as a stepping stone to contact their state authorities. Below is what you find on the NPIC Reporting Pesticide Incidents page. It directs viewers to start with the state agency. What happens, in practice, at the state level? Do the states have the resources to investigate? Conduct testing? Enforce pesticide labels? Some of the states are compiling their own incident data. To what extent do they share this information with OPP? How much additional information is generated via NPIC? Looking at the NPIC environmental incident webpage pasted below, it appears that providing information via the NPIC ecological pesticide incident reporting portal is suggested as a relatively low-priority secondary measure, something extra to do if you want.

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Reporting an Environmental Incident (wildlife, air, soil or water):

1. If a pesticide incident has occurred involving wildlife, air, soil or water, contact your **state pesticide regulatory agency**.
2. You might also contact your **State Environmental Agency** to report the problem.
3. You can also call the National Pesticide Information Center (NPIC) at 1-800-858-7378 to report the incident. NPIC provides these reports to the EPA under a cooperative agreement. NPIC is open from 8:00am - 12:00pm PST.
4. Also, consider reporting the incident to the **product's manufacturer**. Manufacturers are **required by law** to submit reports of adverse effects to the US EPA.

If you want to report pesticide-related illness in wildlife or an environmental problem associated with a pesticide, please submit a report using our quick and easy **Ecological Pesticide Incident Reporting** portal. Reports will improve the quality of environmental incident data the EPA receives. There is an **overview** available that provides additional detail about the reporting criteria.

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There are opportunities for improvement not only in incident report submission and coordination but also in the transparency of the resulting data. Wildlife conservation organizations and other members of the public should not have to make Freedom of Information Act (FOIA) requests to obtain bird incident data from the EPA. FOIA procedures turn the simplest request into a labor- and resource-intensive process that takes months and sometimes years to complete. There is no reason to consider

these bird deaths confidential. Rather, such data ought to be publicly mapped and monitored, and ultimately used to inform OPP in its re-registration decisionmaking. Scientists in academia and the non-governmental sector have much to offer in these efforts. The proposed new EPA webpage on pesticide impact on birds (Draft MOU Section F(11)) would be a perfect venue from which to launch a publicly accessible incident reporting datebase.

The migratory bird MOU is the starting point for a process that could vastly improve the generation and dissemination of incident data, and thereby transform our understanding of pesticide impacts on birds and other wildlife. This process could lead to ecological risk assessments that are far more robust and to re-registration decisions that respond to the actual on-the-ground risks of a chemical. Ultimately this could translate into improved understanding of the human health impacts as well.

Diagnostic Tools (MOU section E(4)(b))

In seeking to improve post-registration evaluation of pesticide effects on migratory birds, the draft MOU also proposes to upgrade mechanisms and to seek funding opportunities for testing bird carcasses for pesticide poisoning.

We are very pleased that OPP recognizes the importance of developing such diagnostic tools. This is urgently needed in handling dead birds that may have been exposed to pesticides. American Bird Conservancy's report last year documented that a single corn kernel coated with any neonicotinoid insecticide is enough to kill a songbird. [Mineau and Palmer, 2013. *The Impact of the Nation's Most Widely Used Insecticides on Birds*.] Yet when a state or county officer receives a report of dead birds or other wildlife, the inspector has no way of determining whether neonicotinoids contributed to the death. There is no readily available biomarker for neonicotinoids as there is for cholinesterase inhibitors such as the organophosphorous pesticides. It is astonishing that the US government would allow a pesticide to be used in hundreds of products without ever requiring the registrant to develop the tools needed to diagnose poisoned wildlife. It would be relatively simple to create a binding assay for the neural receptor which is affected by this class of insecticides.

We are encouraged that the MOU seeks to advance the diagnostic testing of poisoned birds. This is an area that offers opportunity for collaboration with research scientists in academia and beyond, some of whom are already working on bioassays and other techniques.

Pesticide Labeling (F(4), (5)a, (9), 12(b))

The draft MOU should build upon EPA's existing regulatory authority to protect migratory birds and other non-target wildlife from the effects of pesticide exposure. While we welcome the renewed interest in labeling clarity and accuracy, this is something that EPA should be addressing already as a requirement for pesticide labeling. Although we recognize that it is the registrants that write the labels under FIFRA, it is EPA that ultimately must approve the label or cancel the pesticide.

EPA's regulations on non-target wildlife are clear. "Each product *is required* to bear hazard and precautionary statements for environmental hazards, including hazards to non-target organisms." 40 C.F.R. § 156.80 (emphasis added). EPA also has authority under 40 C.F.R. § 156.85 to include specific instructions on the nature of an environmental hazard and "appropriate precautions to avoid potential accident, injury or damage." For example, if there is a history of non-target organisms being harmed by a pesticide, or if field studies demonstrate that the use of a pesticide "may result in fatality to birds, fish,

or mammals," the label statement should read, "This pesticide is extremely toxic to wildlife." The regulations are clear in requiring pesticide labels to warn of hazards to birds and other non-targets, and to provide instructions as to appropriate safeguards.

Pesticide Labeling – Avicides

The recent label decision on Avitrol (4-aminopyridine, 4-AP) illustrates exactly the kind of situation that we are trying to avoid. As American Bird Conservancy's Avian Incident Monitoring System (AIMS) data would suggest, Avitrol presents significant risks to non-target species. Moreover, we would argue that its use is not humane and causes convulsions while animals remain conscious. In 2007, EPA issued its Re-registration Eligibility Decision (RED) for the avicide, which described the extreme toxicity to birds and other non-targets. The RED was very clear about the mitigation measures that would be required to protect birds. http://www.epa.gov/opp00001/chem_search/reg_actions/reregistration/red_PC-069201_27-Sep-07.pdf

Table 14 on page 34 of the RED sets out the requirements:

Table 14. Risk Mitigation Measures for 4-Aminopyridine	
Risk of Concern or Potential Risk	Mitigation Measures
Potential for risk to non-target organisms	4-AP end-use product labels will require that a certified applicator or someone under his/her direct supervision ensures that non-target species do not come in contact with the blend during the entire application period. That authorized handler must stay on the site during the entire application period (from the time the 4-AP treated bait is placed in the application site to the time treated bait and any dead or dying birds are removed). The authorized handler must ensure that children, pets, and non-target species do not come in contact with the blend. Birds killed during treatment must be disposed of by burial or incineration. Prebaiting target birds will also be required on all 4-AP end-use product labels. Prebaiting will promote feeding by target species and will provide an opportunity to assess potential exposure to non-target species. Application of 4-AP treated bait will be prohibited if non-target species are observed feeding on the pre-bait. The only label with gulls listed as a pest, label number 11649-11, has been requested for voluntary cancellation by the registrant. This will preclude gulls from being targeted for use with 4-AP. All 4-AP end-use product labels will require both the common names and the scientific names of target birds to clearly distinguish target species from nontarget species, including those protected under the Endangered Species Act and the Migratory Bird Treaty Act.

During the six years following publication of its Reregistration Eligibility Decision, there was not a word from EPA following up on the RED or sharing the draft label with concerned stakeholders. It was not until OPP had "Accepted" the new label in final form on September 24, 2013, that it became public, and by then it was a done deal and too late to make changes.

In conformance with the RED, the new label states,

> "In populated areas, and most areas open to the public, where feasible, baiting must be performed at elevated sites."

It also states,

> "In areas open to the public, where baiting at elevated sites is not feasible and ground baiting is required, a certified applicator….must ensure children, pets and non-target species do not come in contact with the blend during the entire application period. That authorized handler must not leave the site until all dead/dying birds and unused bait are retrieved from the site."

The label encourages users to bait at elevated sites where feasible. And yet for those elevated applications, and for any uses that are not "in populated areas," the label omits to include the mitigation measures clearly identified in Table 14 of the RED, namely *that the authorized handler must stay on the site during the entire application period*. Where are the safeguards for birds and other non-target organisms when Avitrol is used as recommended at elevated sites or in agricultural or other "non-populated" locations? It would appear that the applicator can leave the bait unattended – in direct contravention of the mitigation measures outlined in the RED.

Near the end of the label there is a general instruction to pick up uneaten bait at the end of the day, where it may be a hazard to other birds or animals. And as a precaution when used "in or around occupied buildings," applicators are asked to pick up and dispose of dead birds by burial or incineration. Still, these provisions are inadequate to protect non-target wildlife.

It is clear that the newly issued label for Avitrol is, at best, ambiguous and unclear. It fails to follow EPA's own directive in the 2007 RED for the protection of non-target species. The discrepancy between the RED and the label exemplifies a process that is broken, one in which the concerns of the conservation community and even EPA's own staff scientists are overlooked or excluded. That said, we are encouraged by the MOU recognition of the need to "improve the quality and clarity of label language during the registration review process…" (MOU Section F(9)) and to upgrade label language for avicides in particular (MOU Section F(12)(b)). We are also very pleased that OPP plans to encourage the development of less toxic alternatives to avicides (MOU Section F(12)(c)).

Pesticide Labeling - Neonicotinoids

Another example of recent labeling that overlooks the effects on avian species is OPP's issuance of its pollinator protection labels in August 2013, which warn of the risks to bees and other insect pollinators and instruct growers to refrain from applying neonicotinoid insecticides while bees are foraging, or if they must do so then to alert the beekeeper in advance. http://www.epa.gov/pesticides/ecosystem/pollinator/bee-label-info-lrt.pdf. See also, http://www.epa.gov/pesticides/ecosystem/pollinator/bee-label-info-graphic.pdf. The label instructions fail to protect bees but also represent a missed opportunity for birds. The disclosures do not get to the heart of the problem: that these insecticides are systemic (infiltrating the entire plant, including the pollen and the nectar) and persistent (lasting in the environment for months and even years). The neonicotinoids are expressed in the pollen and nectar of the plants, so simply asking beekeepers to remove the pollinators and other wildlife during the application period will not solve the problem.

The neonicotinoids are used as seed treatments on more than 140 crop varieties, including the vast majority of the corn grown in this country. As the ABC report documented, even a tiny grain of wheat or canola treated with the oldest neonicotinoid, imidacloprid, is enough to kill a songbird. And as little as 1/10th of a corn seed per day during egg-laying season is all that is needed to affect reproduction with

any of the neonicotinoids registered to date. Neonicotinoid levels found in many ground- and surface waters are beyond the threshold found to kill many aquatic invertebrates. [Mineau and Palmer. 2013.]

It is also worth noting that the website to which the EPA pollinator label directs pesticide applicators for information on protecting bees and other pollinators, the Pesticide Environmental Stewardship website (http://pesticidestewardship.org), constitutes largely a "who's who" of big industry groups. These include BASF, Bayer CropScience, CropLife America, Dow AgroSciences, DuPont Crop Protection, Monsanto, Syngenta Crop Protection, and Responsible Industry for a Sound Environment (RISE).

Based on the neonicotinoid labeling language, it is no wonder that beekeepers and bird conservationists have been questioning the EPA's commitment to protecting pollinators. We hope that the migratory bird MOU will represent a turn-around in OPP's efforts to safeguard pollinators from neonicotinoids and other dangerous pesticides, in line with MOU Section F(5)(a) plans "to continue to work with national and international partners to protect pollinators (including migratory birds) through regulatory, voluntary, education and research programs."

Research

The MOU highlights several critically important areas of avian research, including alternatives to avicides (MOU Section F(12)(c)) and to rodenticides (MOU Section F(13)(b)) and the protection of pollinators (MOU Section F(5)(a)). We are also encouraged by the interest expressed in "improving mechanisms and seeking funding opportunities for testing bird carcasses for pesticide poisoning…." (MOU Section E(4)(b)), as this will be crucial in the development of a more robust incident monitoring system. In the context of outreach and training, MOU Section E(5)(c) lists additional areas that we consider prime candidates for further research, involving nesting, rearing, feeding, migration and over-wintering. Pesticide exposures can have dire effects during the egg-laying season and other key stages in migratory bird development. They can also decimate the terrestrial and aquatic invertebrate populations on which so many birds depend.

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In conclusion, the migratory bird MOU represents an enormous opportunity for OPP, FWS, and other federal and non-federal entities to work together to create robust protections for migratory birds. MOU Section F(8)(b) says that OPP resolves to "[w]ork with non-federal partners engaged in bird conservation on sharing information on birds and pesticides." We welcome this opportunity to build bridges and share information. There is so much that can be done to protect migratory birds, e.g., lowering the thresholds for required reporting under FIFRA 6(a)(2); improving the voluntary reporting mechanisms; coordinating incident data collection with FWS and with other federal, international and state governments as well as veterinary hospitals and other front-line institutions; and developing a transparent system for accessing the resulting data. Government and academia can work with the private sector to create diagnostic tools to identify the cause of death in poisoned animals. Research into chronic and reproductive health effects is sorely needed, as is the development and promotion of safer alternatives to avicides, neonicotinoids, and rodenticides. There are also opportunities to improve pesticide labeling to protect birds and other non-target wildlife. We look forward to working with you to achieve these important goals.

If you have any questions or would like to discuss any of the above issues, please feel free to contact Cynthia Palmer at American Bird Conservancy, cpalmer@abcbirds.org, tel. 202-888-7475.

Sincerely,

American Bird Conservancy

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American Bird Conservancy (ABC) is a 501(c)(3) not-for-profit membership organization whose mission is to conserve native birds and their habitats throughout the Americas. ABC acts by safeguarding the rarest species, conserving and restoring habitats, and reducing threats, while building capacity in the bird conservation movement. ABC is the only national conservation organization with a dedicated program on pesticide impacts to birds. The ABC Pesticides Program seeks to rein in the use of the most harmful chemicals, advance cutting-edge science including evaluation and monitoring of pesticide impacts, and serve as an information and advocacy hub in coordination with the National Pesticide Reform Coalition.