**Harvest Information Program (HIP) Review**

**Report to the Migratory Shore & Upland Game Bird Working Group**

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**Background**

The Harvest Information Program (HIP) was implemented nation-wide in 1998 to provide a sample frame for estimating harvest of waterfowl, doves, band-tailed pigeons, woodcock, snipe, coots, rails, gallinules, and sandhill cranes. Prior to 1998, purchasers of the Migratory Bird Hunting and Conservation Stamp (a.k.a. Duck Stamp) provided the sample frame for estimating harvest of these species/species groups (except sandhill cranes). The wildlife management community had long recognized that not all migratory bird hunters purchase Duck Stamps (e.g., dove hunters who do not hunt waterfowl). The cooperative State-Federal HIP was developed to obtain unbiased estimates of harvest of all migratory game birds nationwide. Under this program, hunters are required to register for HIP every year in each State in which they hunt migratory birds. State agencies are responsible for collecting the hunter information and forwarding it to the United States Fish and Wildlife Service (USFWS), and the USFWS is responsible for implementing the survey, analyzing data, and making results available to States and the public.

In 2000, the Migratory Shore and Upland Game Bird Working Group (MSUGBWG) struck an ad hoc committee and charged it with conducting a complete review of all aspects of HIP to determine whether the program was functioning as intended, and to make recommendations for improvements where necessary. This committee of State and Federal biologists, State licensing administrators, and biometricians reviewed and evaluated:

1. the purpose and history of HIP,
2. the efficacy of the screening (i.e., registration) questions,
3. types, impacts, and scope of vendor non-compliance,
4. the scope and impact of hunter non-compliance,
5. the role and impact of large chain stores in the overall success of HIP,
6. the statistical reliability of HIP surveys,
7. the impacts of HIP on State harvest surveys,
8. the impacts of State license systems, and
9. the cost of implementation.

The committee issued a report of its findings and recommendations in 2002 (Ver Steeg and Elden, 2002). The committee determined that the Harvest Information Program was necessary to improve the reliability of annual harvest estimates for all migratory game birds, especially for doves, woodcock, and marsh birds (snipe, coot, rails, and gallinules). However, the committee recommended several actions to improve the quality of the sample frame and increase compliance by hunters and license vendors. They also recommended that the USFWS investigate using reduced stratification (i.e. reducing the number of screening questions [up to 10 depending on species hunted in the State] and answers [2-4/question]). Recommendations and follow-up actions are summarized in Table 1.

Table 1. Summary of results from HIP evaluation 2002 (Versteeg and Elden, 2002).

|  |  |  |  |
| --- | --- | --- | --- |
| Area | Recommendation | To | Action taken since 2002 |
| Future | Continue HIP with significant improvements | USFWS | Developing ways to better to manage data and assess quality |
| Information & Education | Improve hunter education about HIP | USFWS & States | USFWS – info on HIP on FWS website; States – most have info on their websites and/or in their hunting regulations booklets |
| Communication with States | Work closely with States collectively to improve agency acceptance of HIP | USFWS | States have accepted HIP as necessary and routine, but some States would like to see progress on efforts to streamline |
| Communication with States | Work with States individually to determine any special needs related to implementing HIP | USFWS | This has been an ongoing process |
| Screening questions | Investigate the feasibility of a reduced level of stratification, primarily by examining an additional year of survey data | USFWS | Minimal |
| Screening questions | Pilot a shorter series of screening questions | USFWS | None |
| Enforcement of Hunter Compliance | Stricter enforcement of the HIP registration requirement in States where such enforcement has been minimal or nonexistent | States | Varies by State |
| Enforcement of Hunter Compliance | Provide a more consistent level of enforcement throughout the country | USFWS | New agents receive training on HIP, including examples of what to look for on licenses of several States, and fines for non-compliance are standard across most federal enforcement districts |
| Enforcement of Hunter Compliance | Law Enforcement Committee of the IAFWA to develop uniform enforcement guidelines as soon as possible for adoption by the Service and the States | States & AFWA | ? |
| Vendor Compliance | Employ better techniques to monitor vendor compliance | States | Minimal |
| Vendor Compliance | Examine, and possibly adopt, HIP-certification systems that eliminate or minimize the service of license vendors | States | Many have implemented on-line licensing and HIP registration, and usage by hunters is growing |
| Vendor Compliance | Consider a standardized, multi-State system for HIP data collection and possibly other permits | States | None |
| HIP registration fees | Each State with the authority to require a fee for HIP registration should do so | States | In 2009, 15/49 States were charging for HIP (although some States charge for point of sale permits and offer online permits for free) |
| Exempted Hunters | Minimize the number of hunters exempted from HIP | States | Minimal change |
| Mechanics | Investigate potential sources of bias and evaluate the impact of such biases on the harvest estimates | USFWS | Minimal |
| Mechanics | Develop and maintain data to determine trends and variations in bias over time | USFWS | None |
| Mechanics | Conduct additional research over a number of years to determine if the bias is consistent and to ensure that current harvest estimates are correlated with reality | USFWS | None |
| Mechanics | Determine the impact on harvest survey results when changes are made to the survey design | USFWS | Not applicable (no changes made to design) |
| Funding | Support an increase in the Service’s budget of $300,000 annually to assist the Division of Migratory Bird Management (MBM) with research and outreach efforts related to many of these recommendations | AFWA & USFWS | That funding was eliminated by the time the report was released in 2002 |
| Funding | $150,000 of the $300,000 for at least the next 10 years to support efforts directed specifically at improving the HIP survey design methodology | USFWS | That funding was eliminated by the time the report was released in 2002 |

**Requested actions**

At this time, we do not feel that the USFWS and States need to repeat an intensive review of the HIP, because we expect that the outcome and recommendations would be similar. We recommend focus on four areas. Recommendation #1 would provide a long-term fix; recommendations 2-4 are needed to improve HIP as it currently is implemented.

1. **Long-term: Consider making HIP a Federal permit.** When HIP was initially proposed by IAFWA in 1990, it was envisioned as a national permit that would be required by the USFWS but administered by the States. However, some State agencies and the Office of Management and Budget (OMB) were concerned about the Federal government getting involved in State licensing, and OMB would not approve what it perceived to be a Federal permit. Thus, when phased-in implementation began in 1994, HIP had evolved into its current form: HIP permits (or the equivalent) issued by State natural resources agencies and forwarded to the USFWS. If HIP registration was accomplished through a Federal permit issued by the USFWS, the quality of the sample frame would be improved and States would be relieved of the burden of collecting these data. However, some States charge a fee for their HIP permit and might not want to lose that revenue. Also, we do not know how OMB would react to a proposal to create a Federal permit, or if the USFWS would be able to secure the necessary funding to operate the HIP program.
2. **Ensure game bird managers are involved with the HIP data collection, coding, and transfer processes in each State.** The quality of the HIP sample frame is dependent upon receipt of correct, complete data in a timely manner. Incomplete or late sample frames have limited the utility of the harvest estimates for management, especially the harvest estimates of mourning doves (see Appendix A for description of sample frame problems and Appendix B for summary of requested actions for each state). Inaccurate coding of hunters’ responses to the HIP screening questions has also been a problem (e.g., many hunters assigned to the wrong strata regardless of their answers to the screening questions, because of a programming error). The latter problem is nearly impossible to detect until after the bulk of the hunting registrations have been received. At that point it is too late to make corrections even if the problem is recognized because most hunters have already been surveyed. State agency biologists have limited ability to prevent and correct problems when licensing or IT personnel or contractors have sole responsibility for HIP registration systems and for compiling and transferring the HIP data to the USFWS. In our experience, the quality of the data is improved when people with a vested interest in the survey results (i.e., game bird managers) are closely involved with the HIP process within each State agency. Therefore, we request that each State agency make the quality of its HIP sample frame data a high priority, and **appoint a migratory game bird manager to be responsible for the quality of HIP data from his/her agency**. This person would work with the USFWS’s Branch of Harvest Surveys to ensure that HIP data are coded correctly, compiled from all license types and sources (e.g., online, telephone, point of sale), and transferred to the USFWS in a timely fashion.
3. **Review efficacy of stratification questions.** The HIP registration process takes several minutes (see Appendix C for list of screening questions). Reducing the number of questions and answers would make the process quicker and would likely increase hunter and license vendor compliance. This change would also have the added benefit of clearing up the misconception that the screening questions ***are***the harvest survey. In our conversations with hunters, we have found that many hunters believe this to be the case, and when they see non-compliance, they think that the survey is not providing useful information. Analyses of data from 1999 showed that the screening questions reduced necessary sample size somewhat (VerSteeg and Elden, 2002), but current data need to be analyzed in a cost-benefit context, keeping in mind that a slight loss of efficiency might be beneficial to the overall success of the HIP.
4. **Get permission from State agencies to include email addresses with HIP registrations.** The design of the HIP survey is based on the Dillman Total Design Method (Dillman 1978, Dillman 1991). Hunters are mailed a complete survey packet (diary form and cover letter) within 1-3 weeks of receipt of name and address. A hunter who does not return his/her survey form shortly after the close of the season is sent a reminder post card. About 3 weeks after this mailing, a complete follow-up packet is sent to non-respondents. Finally, 3-4 weeks, later an additional survey packet is sent to remaining non-respondents. Because some States collect email addresses as part of the licensing process, the USFWS would like to investigate the feasibility of sending some reminder mailings by email. This would allow us to reduce printing and mailing costs, as well as reduce our carbon footprint in support of the USFWS Sustainability Initiative. Postage costs are the largest part of the HIP survey program, and anything we can do to lessen these costs will protect the long-term viability of the survey. However, before the USFWS can investigate including email addresses with HIP registrations, approval is needed from State agencies and the Office of Management and Budget. Approval from the States is the first step.

**Citations**

Dillman, D.A. 1978. Mail and telephone surveys: the Total Design Method. Wiley & Sons, New York USA.

Dillman, D.A. 1991. The design and administration of mail surveys. Annual Review of Sociology 17: 225-249.

Ver Steeg, J., and R.C. Elden, compilers. 2002. Harvest Information Program: Evaluation and Recommendations. International Association of Fish and Wildlife Agencies, Migratory Shore and Upland Game Bird Working Group, Ad Hoc Committee on HIP, Washington, DC. 100 pp.

**Appendix A. Overview of HIP Sample Frame Problems**

**(Note: This document was given to each state agency’s Flyway Technical Representative in June 2012).**

**Background.** The Harvest Information Program (HIP) was initiated to provide reliable estimates of hunter activity and harvest for all migratory game birds. Under this program, the states annually collect the names and addresses of individuals who specify they intend to hunt migratory game birds that year, and send that name and address information to the USFWS. The states’ databases of migratory game bird hunters are then used as the sample frames for surveys that generate annual hunter activity and harvest estimates. The HIP was initially implemented in a few states in 1992, and has been fully operational in the 48 contiguous states and Alaska since 1999.

So far, HIP survey results have been used primarily to provide the public and migratory bird managers with state, regional, and national estimates of hunting activity and harvest. However, the migratory bird management community believes more appropriate harvest regulations can be developed by using harvest estimates and banding data to index or estimate abundance of species for which we do not have surveys designed to estimate population size. For example, the Mourning Dove Task Force has recommended the use of such methods, rather than the Call Count Survey or the Breeding Bird Survey (which estimate only trends in birds observed), as the basis for harvest strategies that may be implemented in all 3 dove management units as early as 2014. Similarly, goose managers have begun using harvest and band-recovery data to estimate the abundance of mid-continent light geese.

**The Problem.** If the management community uses HIP harvest estimates explicitly as part of an informed decision-making process, we need to ensure that the estimates are unbiased and precise. The key to reliable results from any survey is the sample frame. A complete list of migratory bird hunters from each state is essential to the success of the HIP because it enables the USFWS to select and survey ***representative*** samples of hunters in each state. If a state’s HIP sample frame excludes certain groups of hunters (e.g., lifetime license holders or nonresident hunters) and the success (harvest) of excluded groups is different than that of hunters included in the sample frame, the survey sample will not be representative and the survey results will likely be biased. More important is the fact that the sample frame is also the source of expansion factors. A harvest survey estimates the average number of birds shot per hunter and that average is then multiplied by the number of hunters in the sample frame (the expansion factor) to obtain an estimate of total harvest. Obviously, if a state’s sample frame only includes 75% (or some unknown percentage) of the migratory bird hunters in the state, the resulting harvest estimates will only be 75% (or some unknown percentage) of the actual harvest.

Conversely, a state also can identify too many hunters for HIP. That is, if hunters who do not intend to hunt migratory birds are included in a state’s list, it is much harder to “find” specifically migratory bird hunters to send surveys. These inflated sample frames are also common, and can result from several practices. The problem is particularly acute in states that have electronic licensing systems but do not charge a fee for a separate migratory bird (i.e., HIP) permit. In some of those states, many license vendors HIP-certify license purchasers without asking them the required HIP questions that are used to identify the migratory bird hunters. Hunters who purchase “sportsmen’s” or “combo” licenses that give them all of the hunting and fishing privileges the state offers, including migratory bird hunting, are often automatically HIP-certified even though they have no intention to hunt migratory birds. In both cases the consequence is that the USFWS receives name and address data for hundreds of thousands of “migratory bird hunters” who are really only anglers, or only deer hunters, etc. Because they have been erroneously identified as migratory bird hunters by the states’ HIP certification processes, many of these people are sampled and asked to participate in HIP surveys. This dramatically increases the costs of the HIP to obtain desired levels of precision (i.e., many more hunters from states’ lists need to be sampled to ensure an adequate number of migratory bird hunters receive surveys), and ultimately undermines public confidence in the HIP and the agencies (state and USFWS) that manage the program (e.g., a deer hunter, non-hunter, or angler receives a survey and wonders why, and sees the effort as a waste of tax dollars).

Often sample frame problems stem from a change in contractor, changes in the state’s licensing system, and/or changes in the automated methods used to extract the HIP data for submission to the USFWS. When such changes result in inflated or incomplete sample frames, it usually takes a few years and considerable effort to identify the cause of the problem and correct it, but it can be done with cooperation from contractors and/or licensing and IT personnel. Sample frames that are inconsistent for no apparent reason are much more difficult to “fix,” but must be addressed if we expect the results of surveys using those samples frames to be the basis for promulgating management regulations.

In addition to problems associated with identifying the correct hunters to survey, we also have experienced problems in getting accurate information from sampled hunters due to delays in receiving lists of names from the states. HIP survey forms are in diary format; they ask the sampled hunter to report the date, location, and number of birds shot for every hunt. The diary design is an attempt to reduce response bias (both memory and prestige bias), but its effectiveness depends on our collective ability to get the forms in the hands of selected hunters before or as soon as possible after they begin hunting. The operational agreement between the Service and the states when the HIP was implemented was that each year the state agencies would send their first batch (i.e., those hunters who purchased a migratory bird hunting license prior to the opening of migratory bird hunting seasons in September) of HIP name and address data to the USFWS in August before the first hunting seasons start. Once seasons commence, they would send additional data twice each month (on the first and third Wednesday of every month) as they HIP-certify additional hunters, until hunting seasons end in the state. This schedule enables the USFWS to send sampled hunters survey forms that they receive no later than four weeks after being HIP-certified. However, in any given year only about half of the states send HIP sample frame data to the USFWS twice a month, and some don’t send data in August or prior to the opening of their state’s hunting seasons. Some send the data monthly; others send only two files, the first in the middle or near the end of the hunting season and the second after the season closes. This limits the effectiveness of the diary format and likely results in response bias that compromises survey results.

In summary, by using the data gathered from HIP to estimate abundance of doves, the management community is increasing the efficiency of that data collection program to improve management decisions and the benefit:cost ratio of the survey. Over time doing so should reduce federal and state costs of monitoring efforts needed to promulgate hunting regulations. However, we must strive to ensure the data collected from these efforts are reliable. Although some of the needed changes to HIP may take some time and resources to resolve (e.g., ensuring representative samples of hunters are surveyed), others can occur quickly and likely with minimal costs (e.g., sending name lists to the USFWS twice each month as was initially agreed upon).

**Appendix B. HIP sample frame reports – summary of requests and recommendations**

**(Note: This document was given to each state agency’s Flyway Technical Representative in June 2012, along with a detailed report for each state.)**

**Alabama:** (1) We request that you work with us to detemine whether we are missing some of your sample frame data for 2005, 2007, 2008, and 2009. (2) We recommend that you take steps to minimize the number of unnecessary HIP registrations issued through your electronic licensing system. This can usually be accomplished by charging a small fee for HIP registration, as recommended by AFWA in 2002, or by providing more explicit instructions to your license vendors. (3) We request that you take steps to ensure that Alabama HIP data are sent to us on schedule, starting with the data for 2012.

**Alaska:** (1) We request that you work with us to detemine whether you are sending us complete sample frames. An incomplete sample frame could be caused by any of several factors, such as poor compliance by hunters, poor compliance by license vendors (failure to send ADFG the completed HIP forms), or omission of incomplete or very late (but valid) HIP forms. If you have state survey estimates of waterfowl harvest that we could compare with HIP estimates, or information from law enforcement on hunter compliance rates, it would help us assess this together. (2) We request that you ensure more timely transmission of the HIP sample frame data by (a) increasing the frequency at which license vendors are required to send in HIP forms, particularly early in the year (prior to October), and (b) elevating the priority of HIP form data entry by your staff and/or contractors.

**Arizona:** (1) We request that you send us counts of the number of migratory bird permits and waterfowl permits sold each license year from 2005-2011. This will enable us to use legitimate expansion factors when we generate the final hunter activity and harvest estimates for those years. (2) We request that you ensure more complete and timely transmission of the HIP sample frame data by (a) increasing the frequency at which license vendors are required to send in HIP forms, particularly early in the year (prior to October), and (b) elevating the priority of HIP form data entry by your staff and/or contractors.

**Arkansas:** (1) We request that you work with us to detemine whether we are missing some of your sample frame data for 2007. (2) We request that you work with us to detemine whether you are sending us complete sample frames. An incomplete sample frame could be caused by any of several factors, such as poor compliance by hunters or omission of some type(s) of HIP-registered hunters from the HIP data you send us. If you have state survey estimates of migratory bird harvest that we could compare with HIP estimates, or information from law enforcement on hunter compliance rates, it would help us assess this together. (3) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2).

**California:** (1) We request that you work with us to detemine how much of your sample frame data for 2003 we are missing, and whether we are missing any of the 2010 data. (2) We recommend that you take steps to minimize the number of unnecessary HIP registrations that are issued. This can usually be accomplished by charging a small fee for HIP registration, as recommended by AFWA in 2002, or by providing explicit instructions to your license vendors about which hunters need HIP registration and which ones don’t. (3) We request that you take steps to ensure that you include HIP registration data from all sources, including internet license sales and HIP registrations of lifetime license holders who hunt migratory birds, and send us the electonic data twice a month, in accordance with the established schedule.

**Colorado:** (1) We request that you work with us to detemine the actual number of HIP registrations that your contractor issued for the 2009 hunting season. (2) We request that you take steps to ensure that your contractor sends us all of the Colorado HIP data on schedule, starting with the data for 2012.

**Connecticut:** We request that you work with us to detemine whether we are missing some of your sample frame data from 2005-2011. Please check your accouting records and if possible, send us the number of migratory bird (HIP) permits you sold each month from January 1, 2005 through February 28, 2011.

**Delaware:** (1) We request that you work with us to detemine the actual number of HIP registrations that your contractor issued for the 2008 and 2010 hunting seasons. (2) “timely data transfers” (see Colorado #2).

**Florida:** (1) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2).

**Georgia:** (1) We request that you work with us to detemine the correct number of HIP registrations Georgia issued for the 2003, 2009, and 2010 hunting seasons. (2) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (3) “detemine whether you are sending us complete sample frames” (see Arkansas #2).

**Idaho:** We request that you work with us to detemine the correct number of HIP registrations Idaho issued for the 2007 hunting season.

**Illinois:** (1)We request that you work with us to detemine the correct number of HIP registrations your telephone contractor issued for the 2003 hunting season. (2) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2).

**Indiana:** “detemine whether you are sending us complete sample frames” (see Arkansas #2).

**Iowa:** (1) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2).

**Kansas:** We request that you work with us to detemine the correct number of HIP registrations Kansas issued for the 2004 and 2005 hunting seasons. This will enable us to use legitimate expansion factors when we generate the final hunter activity and harvest estimates for those years.

**Kentucky:** (1) We request that you work with us to detemine the correct number of HIP registrations/permits that Kentucky issued for the 2005, 2006, 2007, and 2008 hunting seasons. (2) We recommend that you take steps to minimize the number of unnecessary HIP registrations issued through your electronic licensing system. This can perhaps be accomplished by providing more explicit instructions to your license vendors about which hunters need to be HIP-registered and which ones do not. (3) “timely data transfers” (see Alabama #3).

**Louisiana:** (1) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2).

**Maine:** We appreciatethe cooperation we have enjoyed with Maine in examining sample frame issues, and we request that you continue to work with us to detemine whether you are sending us complete sample frames. We also recommend that you take steps to minimize the number of unnecessary HIP registrations issued through your electronic licensing system. This can perhaps be accomplished by providing more explicit instructions to your license vendors.

**Maryland:** “timely data transfers” (see Alabama #3).

**Massachusetts:** (1)We request that you work with us to detemine the correct number of HIP registrations Massachusetts issued for the 2007 hunting season. (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2).

**Michigan:** (1) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2).

**Minnesota:** (1) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2).

**Mississippi:** (1) We request that you work with us to detemine whether we are missing some of your sample frame data for 2003, 2005, 2007, 2008, 2009, and 2010. (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2). (3) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (4) “timely data transfers” (see Alabama #3).

**Missouri:** None. Missouri’s execution of the state’s HIP responsibility is an outstanding example of how this program can and should be conducted. Please just keep doing what you’re doing.

**Montana:** (1) We request that you work with us to detemine whether we are missing some of your sample frame data for 2008. (2) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (3) “timely data transfers” (see Alabama #3).

**Nebraska:** (1) We request that you work with us to detemine the actual number of HIP registrations that your contractor issued for the 2009 hunting season. (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2). (3) “timely data transfers” (see Colorado #2).

**Nevada:** (1) We request that you work with us to detemine whether we are missing some of your sample frame data that your contractor collected for 2007 and 2008. (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2).

**New Hampshire:** (1)We request that you work with us to detemine whether we are missing some of your sample frame data from 2003, 2004, and 2006. (2) “timely data transfers” (see Alabama #3).

**New Jersey:** We request that you take steps to ensure that you and/or your contractors send us the data for all New Jersey HIP registrations and that the data are sent to us on schedule, starting with the 2012-13 season.

**New Mexico:** We request that you work with us to detemine whether we are receiving complete sample frames for New Mexico. An incomplete sample frame could be caused by any of several factors, such as poor compliance by hunters, poor compliance by license vendors (failure to send in the completed HIP forms), or, if you provide hunters the opportunity to get their HIP registration on-line, failure to transfer electronic HIP data to us. If you have state survey estimates of migratory bird harvest that we could compare with HIP estimates, or information from law enforcement on hunter compliance rates, it would help us assess this together.

**New York:** (1)“detemine whether you are sending us complete sample frames” (see Arkansas #2). (2) We request that you take steps to ensure that you and/or your contractors send us the data for all New York HIP registrations and that the data are sent to us on schedule, starting with the 2012-13 season.

**North Carolina:** (1) We request that you continue to work with us to detemine whether you are sending us complete sample frames. (2) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (3) “timely data transfers” (see Alabama #3).

**North Dakota:** “timely data transfers” (see Alabama #3).

**Ohio:** (1) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (2) “timely data transfers” (see Alabama #3).

**Oklahoma:** (1)“detemine whether you are sending us complete sample frames” (see Arkansas #2). (2) “timely data transfers” (see Alabama #3).

**Oregon:** “timely data transfers” (see Alabama #3).

**Pennsylvania:** “timely data transfers” (see Alabama #3).

**Rhode Island:** (1) We request that you send us counts of the number of HIP registrations issued in Rhode Island in each of the following license years: 2003, 2005, and 2007-2011. This will enable us to use legitimate expansion factors when we generate the final hunter activity and harvest estimates for those years. (2) We request that you ensure more complete and timely transmission of the HIP sample frame data by (a) increasing the frequency at which license vendors are required to send in HIP forms, particularly early in the year (prior to October), and (b) elevating the priority of HIP form data entry by your staff and/or contractors.

**South Carolina:** (1)We request that you work with us to detemine the correct number of HIP registrations South Carolina issued for the 2003 hunting season. This will enable us to use legitimate expansion factors when we generate the final hunter activity and harvest estimates for that year. (2) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2).

**South Dakota:** We request that you work with us to detemine whether we received the data from all of the HIP registrations South Dakota issued for the 2006 and 2007 hunting seasons.

**Tennessee:** (1) We request that you work with us to detemine the correct number of HIP registrations/permits that Tennessee issued for each year from 2003-2010. This will enable us to use legitimate expansion factors when we generate the final hunter activity and harvest estimates for those years. (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2). (3) “timely data transfers” (see Alabama #3).

**Texas:** (1)We request that you take steps to minimize the number of unnecessary HIP registrations issued through your electronic licensing system. This could perhaps be accomplished by requiring super combo license purchasers to “activate” their migratory bird hunting privilege by registering for HIP, and/or by providing more explicit instructions to your license vendors about which hunters need to be HIP-registered and which do not. (2) “timely data transfers” (see Alabama #3).

**Utah:** (1) We request that you work with us to detemine the actual number of HIP registrations that your contractor issued for the 2009 hunting season. (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2). (3) “timely data transfers” (see Colorado #2).

**Vermont:** (1) We request that you work with us to detemine whether we are missing some of the HIP registration data that you collected for 2003, 2005, 2006, and 2010. (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2). (3) “timely data transfers” (see Rhode Island #2)

**Virginia:** (1) “detemine whether you are sending us complete sample frames” (see Arkansas #2). (2) “timely data transfers” (see Colorado #2).

**Washington:** (1) We request that you work with us to detemine the correct number of HIP registrations/migratory bird permits that Washington issued for each year from 2006-2010. This will enable us to use legitimate expansion factors when we generate the final hunter activity and harvest estimates for those years. (2) “detemine whether you are sending us complete sample frames” (see Arkansas #2). (3) “timely data transfers” (see Alabama #3).

**West Virginia:** (1) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (2) We request that you take steps to ensure that all of West Virginia’s HIP data are sent to us on schedule, particularly after September 1 when hunting seasons are underway.

**Wisconsin:** (1) “take steps to minimize the number of unnecessary HIP registrations” (see Alabama #2). (2) We request that you send us the first file of your annual HIP data on schedule in late August, starting in 2012.

**Wyoming:** (1) “detemine whether you are sending us complete sample frames” (see Arkansas #2). (2) “timely data transfers” (see Alabama #3).

**Appendix C. Standard HIP registration questions. States can omit questions that are not relevant to seasons in their States (e.g., cranes, brant, sea ducks).**

Q1. Will you hunt migratory birds this year?

A. Yes or no.

Q2. How many ducks did you harvest last year?

1. Did not hunt, 0, 1-10, or more than 10.

Q3. How many geese did you harvest last year?

1. Did not hunt, 0, 1-10, or more than 10.

Q4. How many doves did you harvest last year?

1. Did not hunt, 0, 1-30, or more than 30.

Q5a. How many woodcock did you harvest last year?

1. Did not hunt, 0, 1-30, or more than 30.

or

Q5b. Did you hunt woodcock last year?

1. Yes or no.

Q6. Did you hunt coots or snipe last year?

1. Yes or no.

Q7. Did you hunt rails or gallinules last year?

1. Yes or no.

Q8. Will you hunt cranes this year?

1. Yes or no.

Q9. Will you hunt band-tailed pigeons this year?

1. Yes or no.

Q10. Will you hunt brant this year?

1. Yes or no.

Q11. Did you hunt sea ducks last year? (NOTE: Some States have changed this to “Will you hunt sea ducks this year?” to identify out-of-state sea duck hunters.)

1. Yes or no.