Evaluation of the 2003 Illinois Habitat Stamp:
Vendor Cooperation and Completeness of Information on Stubs

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ABSTRACT:

The objectives of this study were to determine the completeness of information recorded on the stubs for the 2003 Illinois Habitat Stamp. Resident and non-resident purchases of the Habitat Stamp were also measured, as well as game species reported as hunted the previous year. The study showed that vendors legibly completed the purchaser's information on 38.3% of stubs in booklets (n = 3,207 booklets) with 26-30 stubs filled out, a decrease from 1994. The study also showed that for booklets sampled, 48.0% had 1-5 stubs complete but illegible and 14.0% had 1-5 stubs voided. For game species marked as hunted the previous year, 38.0% of the booklets had 26-30 stubs so marked. Species marked as hunted were compared with results from the 2003-2004 Hunter Harvest Survey. Possible species hunted included rabbit, squirrel, quail, dove, furbearers, pheasant, deer and groundhog. The most frequently marked species were deer, pheasant, and rabbit. Forty-six percent (46.0%) of the 2003 Habitat Stamp purchasers reported hunting deer the previous year, compared to 61.0% reported via the 2003 Hunter Harvest Study. For pheasant, the percentages were 27.0% and 17.3% respectively. For rabbit the percentages were 35.4% and 22.1%. Of the purchasers of the 2003 Illinois Habitat Stamp 3.2% were non-residents, an increase from the 2.3% calculated for 1994.
OBJECTIVES:

The objectives of this study were to determine the completeness of information recorded on the stubs for the 2003 Illinois Habitat Stamp. Hunters 16 years of age or older are required to purchase this stamp before going afield. The information on the stub is used to complete mailing lists for various hunter surveys.

METHODS:

Methods used for evaluating the 2003 Habitat Stamp stubs were similar to those described by Zielske (1995). Each booklet returned by vendors to the DNR's Permit Office was systematically evaluated to determine completeness of information recorded on the stubs (n = 3,207 booklets). Only booklets where all 30 stubs were present were used. Information gathered from each complete (30 stubs) booklet included: 1) the ID number of the first stub, 2) the number of completely filled out and legible stubs, 3) the number of complete but illegible stubs, 4) the number of legibly filled-out but incomplete stubs, 5) the number of voided stubs, 6) the number of stubs with the species hunted portion filled out, and 7) the species hunted portion was categorized as “no species marked”, “≥1 but not all species marked”, and “all species marked”. We defined “illegible” as those stubs where any part of the stub was not readable, but this only applied to completely filled out stubs. Incomplete stubs were not counted as illegible because, being incomplete, they could not be used to compile a mailing list, regardless of legibility.

Next, a random sample of stubs (n = 2,000 stubs) was selected from the 3,207 booklets that were examined. From this sample, stubs were evaluated for state of residency and species hunted (R = rabbit, S = squirrel, Do = dove, Q = quail, FH = furbearers, P = pheasant, De = deer, G = groundhog).

A separate random sample of stubs was selected to compile a mailing list for conducting a mail survey. The survey, entitled Illinois Hunter Harvest Survey, is conducted annually by the
Human Dimensions Program of the Center for Wildlife and Plant Ecology at the Illinois Natural History Survey, and contains questions regarding species hunted, county hunted most, number of days hunted, and number of animals harvested (Miller et al. 2004). We compared the results of the 2003-2004 Hunter Harvest Survey to the results of the present study to evaluate the degree of agreement and quality of data gathered on habitat stamp stubs. Data obtained was entered and analyzed in SPSS 10.0

RESULTS:

When reviewed for legibility, 0.6% of the booklets contained no legibly filled-out stubs, 1.0% had 1-5 legible stubs, 1.5% had 6-10 legible stubs, 4.8% had 11-15 legible stubs, 15% had 16-20 legible stubs, 38.8% had 21-25 legible stubs, and 38.3 percent had 26-30 legible stubs (Table 1). No stubs were illegible in 47.9% of the booklets, whereas 47.8% had 1-5 illegible stubs, 3.5% had 6-10 illegible stubs, .5% had 11-15 illegible stubs, .3% had 16-20 illegible stubs, and 0% had ≥21 illegible stubs (Table 2).

When reviewed for completeness, 15% of booklets had no incompletely filled-out stubs, 45.9% had 1-5 incompletely filled-out stubs, 25.2% had 6-10 incompletely filled-out stubs, 9% had 11-15 incompletely filled-out stubs, 2.9% had 16-20 incompletely filled-out stubs, and 1% had 21-30 incompletely filled-out stubs (Table 3).

Fourteen percent (14%) of booklets contained 1-5 voided stubs, but no booklet contained more than 5 voids. Eighty-six percent (86%) of booklets contained no voided stubs (Table 4).

For the species hunted section, 6.3% of booklets had no stubs with no game species marked, 39.8% had 1-5 stubs with no game species marked, 20.5% had 6-10 stubs with no game species marked, 10.5% had 11-15 stubs with no game species marked, 8.3% had 16-20 stubs with no game species marked, 6.1% had 21-25 stubs with no game species marked, and 8.5% had 26-30 stubs with no game species marked (Table 5). Three percent (3%) of booklets had no
stubs marked as hunting ≥1 (but not all) species the previous year, 6.7% had 1-5 stubs marked, 6.9% had 6-10 stubs marked, 8.7% had 11-15 stubs marked, 11.8% had 16-20 stubs marked, 24.5% had 21-25 stubs marked, and 38.4% had 26-30 stubs marked (Table 6). For all game species marked as hunted, 8.3% of booklets had 1-5 stubs, 0.2% had 6-10 stubs, and 0.1% had 16-25 stubs. There were no booklets that had 11-15 or 26-30 stubs marked as hunted all game species, and 91.3% of booklets had no stubs marked as hunting all game species the previous year (Table 7).

When a random sample of stubs (n = 2000 stubs) was sampled for species hunted during the 2002 season and compared to the Hunter Harvest Survey data for 2003-2004 season (Miller et al. 2004), 25.4% and 22.1% marked hunting rabbit, 24.6% and 31.9% marked hunting squirrel, 19.8% and 18.5% marked hunting doves, 15.3% and 10.3% reported hunting quail, 5.3% and 14.2% marked hunting furbearers, 27% and 17.3% marked hunting pheasant, 45.9% and 61.4% reported hunting deer, and 2.3% and 1.92 reported hunting groundhog. 'None of the above' was marked 5.3% of the time, and 32.1% of the stubs had no game marked (Table 8).

The random sample of 2000 stubs was also used to determine the state of residency for Illinois Habitat Stamp purchasers. Results showed that 96.8% of the purchasers of the 2003 Stamp were residents of Illinois and 3.2% were non-residents. The percentages for the 1994 stamps were 97.8% and 2.3% (Table 9).

DISCUSSION:

A relatively small percentage (0.6%) of Illinois Habitat Stamp booklets contained no stubs that were legible. At the other extreme, the percentage of booklets with 26-30 legible stubs (38.3%) was lower than indicated by Zielske (1995) for 1994 when 82.3% of booklets contained 26-30 stubs legibly filled-out. Since similar studies were not conducted for 1995 through 2002 stamp stubs, there are no data to indicate when this reduction took place. However, it appears
that currently less than half of the booklets contain 26-30 stubs that are being completely filled out legibly. Over half of the booklets (52.1%) had one or more stubs that were illegible, which is also a decline from the 29.5% of booklets with one or more illegible stubs as reported in the Zielske (1995) study.

Only 15% of booklets had no incompletely filled-out stubs, once again a decrease from Zielske's (1995) study for 1994 stubs where 76.5% of booklets contained no incomplete stubs. The number of voided stubs has also increased since 1994. Zielske reported that 94% of booklets had no stubs voided, whereas in 2003 86% of booklets had no stubs voided. Although Zielske (1995) reported some booklets with 6-10, 11-15, 16-20, 21-25, and 26-30 stubs voided, the analysis of 2003 booklets returned no booklet with any of these numbers of voided stubs.

The percentage of booklets that had no stubs with no game species marked as hunted the previous year increased from 0.9% in 1994 to 6.3% in 2003. For 1994, the range between groups was not large, with booklets containing 6-15 stubs having the largest percentage of stubs (41.6%) with no species marked. For 2003, most booklets, 60.3%, had 1-10 stubs with no game species marked while the rest ranged between 6-10% having booklets with no game species marked (Table 5). In 1994, 5.9% of booklets had no stubs with ≥1 species marked, while in 2003 6.3% had booklets with no stubs marked with ≥1 species. The largest percentage (38.4%) of booklets had 26-30 stubs marked with ≥1 species in 2003 (Table 6), while in 1994 the largest percentage of booklets (21%) had 16-20 stubs marked with ≥1 species. Very few booklets had stubs with all species marked (8.7%) in 2003, but of those that did most had 1-5 stubs with all species marked (8.3%) (Table 7). In most, though not all, cases when all game species were marked, this designation included 'none of the above', suggesting vendors were drawing lines through all species just to save time, to the detriment of those trying to conduct mail-letter surveys. The percentages for 2003 represent a slight improvement from 1994 when 16% of stubs
had all species marked. However, it is unclear what 'all species marked' was defined as for the 1994 study and if any included 'none of the above'.

Some game species were marked as hunted the previous year on the 2003 habitat stubs in similar percentages as they were reported via the 2003-2004 Hunter Harvest Survey. Rabbit was marked at 25.4% and reported at 22.1%, dove was marked at 19.8% and reported at 18.5%. On the other hand, some game species had percentages marked and reported that were not similar: furbearers were marked 5.3% and reported 14.2%, pheasant were marked at 27% but reported at 17.3%, and deer were marked at 45.9% and reported at 61.4%. For deer, however, the reported percentage is only for shotgun hunting, and does not reflect muzzleloader or archery hunting. About 1/3 (32%) of the sampled stubs had no game species marked, and 5.3% had 'none of the above' marked (Table 8).

Finally, the percentages of non-residents who purchased a 2003 Illinois Habitat Stamp increased slightly from the percentage of non-residents who purchased a 1994 Illinois Habitat Stamp. The percentages were 3.2% and 2.3%, respectively (Table 9).

**CONCLUSIONS:**

It appears that accuracy and completeness in providing information via the Illinois Habitat Stamp stub decreased from 1994 to 2003. There were more incomplete stubs, more illegible stubs and more voided stubs in 2003 than in 1994. This has the potential of introducing bias in mailing lists created for conducting hunter surveys by the Human Dimensions Program of the Illinois Natural History Survey. Since the process of issuing hunting licenses and permits will be converted to an automated electronic system in 2006, additional studies should be conducted to evaluate the accuracy and completeness of information reported with the new system.
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LITERATURE CITED:
