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Comparing the Flights of Elderly Seasonal Migrants: Arizona "Sunbirds" vs. Minnesota "Snowbirds"†

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The interstate migration of elderly households has been studied by those in various disciplines who have an interest in gerontology. While this has provided a rich mosaic for understanding the phenomenon, the focus has been on explaining permanent migration to the Southern, or Sunbelt, states on the basis of geographic and socio-economic differences. In addition, attention has also been paid to the reverse migration of very old households to Northern states using similar approaches and Census-based data (see Longino, 1979, and Serow, 1978).

While Census information has facilitated the study of elderly permanent migration, the lack of comparable data has stymied those interested in elderly seasonal migration (see Smith, 1989). Most studies of this phenomenon have relied on surveys conducted in a Southern state when such migrants were present (see Table 1). As the authors have earlier argued (Hogan and Steinnes, 1993b), these destination surveys are unable to estimate a seasonal migration rate or compare migrants and non-migrants. The answers to these important questions can only be provided by a survey of migrants and non-migrants from the same origin state. Unfortunately, as can be seen in Table 1, only two such surveys have been conducted, one in New York (Krout, 1982) and the other in Minnesota (Hogan and Steinnes, 1993b).

Both these origin surveys, as well as the aforementioned destination surveys, have provided information on elderly households who are Northern state residents but spend a substantial part of the winter in a Southern state. These seasonal migrants have come to be known as "Snowbirds", which

suggests their inclination to fly South, like birds, when winter approaches. In addition to survey data, the 1980 Census provided some data on "Snowbirds", but only for those who land in Arizona and Florida (see Table 1).

While seasonal and permanent elderly migration are separate phenomena (see Hogan and Steinnes, 1993a), the connection, or linkage, between the two has been considered. Some have proposed that seasonal migration might be a precursor to permanent migration, but the definitive empirical evidence to support this position has not, as yet, been found. Here, too, the focus has been exclusively on the North to South migration patterns.

Our interest in this paper is to broaden the concept of elderly seasonal migration by considering the outflows, during the summer, of elderly residents of Southern states. Such escapees from the heat might be termed "Sunbirds" and are analogous to the more widely recognized, and studied, "Snowbirds". In fact, as indicated in Table 1, there are no existing studies of "Sunbirds" using either Census or survey information. The flights of both are induced by the weather and, thus, we would expect to find similarities between the two varieties of seasonal migrants. More fundamental, perhaps, is why some residents choose to seasonally migrate while others do not. The answer to this question can only be provided by surveying seasonal migrants and non-seasonal migrants from the same origin state.

In this paper we will present evidence on the "Sunbird" activity of Arizona residents derived from a statewide household survey conducted in Arizona in 1990. The results will be compared to a similar survey done in Minnesota which probed the "Snowbird" activity of Minnesota residents. Surprisingly, we find the tendency for elderly Arizona residents to leave in the summer to be comparable to the tendency of elderly Minnesotans to go South during the winter. We also compare the timing and duration of the seasonal flights in both directions. Finally, we explore the more basic issue of why some residents, of a given origin state, seasonally migrate while others do not. We discover, among other things, that "Sunbirds" are likely to be recent permanent migrants. This suggests that permanent migration, to Arizona, is a predictor, or precursor, of seasonal migration from Arizona during the summer. Such a linkage between seasonal and permanent elderly migration has not previously been considered in the literature which has focused exclusively on North to South flows. We hope this paper is successful in directing attention to the seasonal outflows from the South and broadening the discussion of elderly migration.

METHODS

Whether seasonal or permanent, the decision to migrate is made by households while they are in the origin, not the destination, state. Consequently, to consider why some households decide to migrate and others do not it is necessary to

survey, in the origin state, both migrant and non-migrant households. This paper is based on statewide surveys conducted in Arizona and Minnesota of both seasonal migrant and non-seasonal migrant elderly households.

One might conceptualize that elderly households make a decision, in each time period, whether to migrate or not and then they decide if the migration will be permanent or seasonal. An alternative view would be that they choose between the three options (seasonally, permanently, or not migrating) in any given time period. To distinguish between these two plausible behavioral models would require surveying households making each of the choices and probing their decision-making process. Unfortunately, no such survey has, as yet, been conducted.

It should be noted that there is a basic difference in the decision to seasonally migrate and the decision to permanently migrate that has to do with the time period in which the decision is made. Put simply, the decision to permanently migrate is made at a point in time whereas those who seasonally migrate decide to do so on an annual basis. The latter decision also involves a subsequent, or simultaneous, decision as to duration which permanent migrants do not have to make. Both must also decide their destination and there has been some controversy as to whether this choice is made subsequent to (Wiseman, 1980), or simultaneously with (Cuba, 1992), the decision to migrate.

The timing difference creates the biggest barrier to surveying households, from the same origin state, who make the

three choices during a given year. While telephone surveys conducted in an origin state, such as the ones we will be using, find households which seasonally migrate and those who do not, the households who have permanently migrated are not contacted. To do so would require tracking them to their new destination state. This might be done via nationwide surveying, such as the Census, or if a panel of households were followed over several years, or even a lifetime, as they migrated either seasonally or permanently. Until such extensive surveying occurs, a complete analysis of elderly migration will not be possible.

Sampling Procedures

Our intention is to focus only on the choice of seasonally migrating or not and to do so from the perspective of two origin states, one in the South (Arizona) and one in the North (Minnesota). The information was collected from a random sample of households conducted by telephone in each state. While the survey instruments were not identical (see Table 2 for specifics), each asked comparable demographic questions that might indicate why some households seasonally migrate while others do not. Most important for our purposes is that each survey inquired about seasonal migration activity (i.e., timing, duration and destination) during the past year.

One difference is the amount of time spent out of state to be considered a seasonal migrant. The Arizona survey required

four weeks while the Minnesota instrument required five weeks. It should be pointed out that both required the weeks be consecutive, whereas the only previous origin state (New York) survey of seasonal migration activity included as seasonal migrants those who spent eight weeks away from home, either in or out of state and not necessarily consecutively (see Table 2).

Another difference between the Arizona and Minnesota surveys, which we have adjusted for, is the time frame for surveying. In Arizona the surveying was done over twelve months whereas in Minnesota the winter months, when seasonal migrants would be absent, were not included. The reason for this difference is that the Minnesota survey deliberately targeted elderly households and focused on seasonal migration activity. On the other hand, the Arizona survey was administered to all households and was designed to collect information on many subjects besides seasonal migration. Nonetheless, the similarities between the two surveys is sufficient to allow for meaningful comparisons about the two varieties of elderly seasonal migrants, "Sunbirds" from Arizona and "Snowbirds" from Minnesota.

While the Arizona survey had many responses, only 1228 of these were elderly (over 60) households. This is less than the 1500 over 60 households responding in Minnesota but we will take account of the different sample sizes in the comparisons which follow. The sampling was done randomly by telephone in both states and similar response rates were obtained.

In summary, the two surveys will allow us to profile both "Sunbirds" and "Snowbirds" and to compare and contrast them. Moreover, we will be able to compare these two species of seasonal migrants with the non-migrants from their respective states. Given that "Snowbirds" have been defined and studied previously, we will concentrate our attention on the Arizona "Sunbirds", a heretofore unidentified species of the elderly migrant genus.

RESULTS

The authors have previously reported (Hogan and Steinnes, 1993b,c) results from the Minnesota survey and so here we will only provide the results needed in order to compare them to the new information on Arizona "Sunbirds". Out of the 1228 elderly Arizona households surveyed, 124 (or 10.1%) met the criteria required to be considered seasonal migrants. This is comparable to the Minnesota seasonal migration rate of 9.2% (138 of 1500). The "Sunbird" migration rate of 10.1% suggests that "Sunbirds" represent a substantial migration flow, at least from Arizona. One would suspect that other Sunbelt states, like Florida, have substantial numbers of elderly residents who also escape the heat in the summer.

As one would expect, the Arizona "Sunbird" flights are concentrated during July and August just as Minnesota "Snowbirds" tend to be gone in January and February. However, the duration

of stay is only 2.3 months for Arizona "Sunbirds" whereas Minnesota "Snowbirds" are gone an average of 3.5 months. Thus, the loss to origin states, in terms of lost spending (per elderly seasonal migrant household), is greater for Northern states than for Southern states. Likewise, the gain (per household) in Southern states from "Snowbird" spending is greater than the comparable "Sunbird" spending impact. Most important, however, is the recognition that the effects of "Snowbird" spending shifts are to some extent mitigated by the "Sunbird" flows. To estimate the net impact of seasonal migration on any given state, or all states, would require more extensive surveying than has been done to date. Moreover, the impact of permanent migration in the South (Longino and Biggar, 1981) may be decreased by the consideration of "Sunbird" activity.

The potential linkage between permanent and seasonal migration is something that has intrigued researchers studying North to South flows for some time. McHugh (1990) posed the question of whether seasonal migration is a precursor to permanent migration or an alternative lifestyle. The answer has not been definitively provided, as yet. The Arizona survey asked all households when they had moved to Arizona and where they had previously lived. By considering these questions for the seasonal migrant ("Sunbird") and non-seasonal migrant populations, we have some indication that those who permanently migrated to Arizona are more inclined to seasonally migrate. For example, we found 11% of the permanent migrants to be "Sunbirds"

whereas only 2.9% of Arizona natives engage in seasonal migration during the summer. Moreover, those who are the most recent permanent migrants to Arizona (i.e., living in Arizona 0-9 years) were the most inclined to seasonally migrate (15%) and migration rates tended to decline for those permanent migrants who had been living in Arizona longer. The conclusion, it would seem, is that permanent migration is, if anything, a predictor of, or precursor to, seasonal migration for Arizona residents. Whether this linkage holds for other Southern states, or for Northern states, remains to be seen.

We also determined, for seasonal migrants and non-seasonal migrants, the states from which they permanently migrated to Arizona. These tendencies are reflected in Table 3 which indicates "Sunbird" migration rates for various permanent migration origin states. The highest rates tend to be for the Northern states. This suggests their seasonal migration may be to the state where they previously lived. Unfortunately, this can not be established precisely since the Arizona survey did not determine which state seasonal migrants went to but only that they went out of Arizona. On the other hand, the Minnesota survey determined the destination state of seasonal migrants, or "Snowbirds", but it did not ask the state from which they permanently migrated to Minnesota. Moreover, the Minnesota survey only ascertained if a permanent migration had occurred in the last six years, whereas the Arizona instrument inquired about previous residence no matter how recently the households had

moved to Arizona. To better consider the linkage between permanent and seasonal migration it will be necessary to use the same survey instrument, hopefully in all states.

Nonetheless, the Arizona and Minnesota surveys when viewed together do, indirectly, support the hypothesis that "Snowbird" activity is a precursor to permanent migration and, subsequently, to "Sunbird" activity. This sequence is suggested by the age specific seasonal migration rates found from the two surveys (see Table 4). Specifically, the highest "Snowbird" rates are found for those in their 60's while the highest "Sunbird" rates are found for those in their 70's. This pattern is consistent with the stated sequencing of migration activity over a lifetime (i.e., "Snowbirds" become permanent migrants to the "Sunbelt" and then "Sunbirds" as they age).

Having noted some of the differences between the Arizona and Minnesota surveys, we will now proceed to consideration of the information, in addition to age, which was common to both surveys. In Arizona those living in single family homes were the least inclined (8.5%) to "Sunbird" while those in mobile homes showed the highest inclination (14.7%). Arizona apartment dwellers had an intermediate (10.9%) rate, whereas in Minnesota those in apartments were the least likely (5%) to "Snowbird" and single family residents were more likely (9.1%).

In both states those with higher education tended to show a greater proclivity to engage in seasonal migration activity as did those with higher incomes. These findings are consistent

with the conclusions put forth in many of the studies in Table 1. The Minnesota survey also ascertained life occupation and this showed those in managerial (18.2%), sales (16.4%) and crafts (12.4%) to have the highest tendency to be "Snowbirds", while service (5.0%), farm (5.1%) and laborer (5.5%) occupations had the lowest inclinations. Unfortunately, the Arizona Survey did not inquire about occupation.

In terms of marital status, both surveys showed higher seasonal migration rates for married, than unmarried, households. However, the difference was much greater in terms of "Snowbirding" (12.4% of married and 5.1% of unmarried) than for "Sunbirding" (11.5% of married and 8.4% of unmarried). On the Arizona survey, the unmarried group was further divided into groups with distinctly different tendencies to "Sunbird" (i.e., 9.9% of widowed, 7.3% of never married and only 3.0% of divorced households). Both surveys showed, not surprisingly, that those retired and not working are the most inclined to engage in seasonal migration activity.

In Arizona the non-metropolitan residents of the state showed a greater tendency (12.7%) to "Sunbird" than those living in the Phoenix (10.5%) and Tucson (7.0%) urban areas. Similarly, in Minnesota those living in the Minneapolis-St. Paul area had a lower (8.3%) "Snowbird" migration rate than the rest of the state (9.8%). Moreover, those Minnesotans living in small and medium size towns showed higher rates that those living in larger cities and unincorporated, or rural, areas had the highest rates.

The Minnesota survey provided some information not available for the Arizona sample. For example, among the 138 Minnesota "Snowbirds", the most common destinations were Arizona (43), California (23), Florida (23), and Texas (20). Also, the starting age for "Snowbird" activity ranged from 34 to 80 and the number of years of "Snowbird" activity ranged from 1 to 30. This suggests that seasonal migration is for some an activity which is initiated well before reaching elderly status and one that goes on over a large part of a lifetime.

DISCUSSION

The methodological goal of this paper has been to recognize the need for origin-based survey data as a means of ascertaining the seasonal migration rate of an origin state and investigating the differences between migrant and non-migrant populations. Two such surveys conducted in Arizona and Minnesota are the bases for this paper, whereas most previous studies of elderly seasonal migration have relied on surveys conducted in a Sunbelt destination state.

Primarily, this paper identifies and defines "Sunbirds", a neglected, but hardly endangered, species of the elderly migrant genus. In fact, the tendency for elderly households to leave Arizona in the summer is found to be greater then the propensity for elderly Minnesota households to be "Snowbirds". This alone suggests that the study of elderly seasonal migration, which has

concentrated on North to South flows, needs to be expanded just as the study of permanent migration has come to consider the reverse migration of very old households.

In fact, we present evidence that "Sunbirds" are older than "Snowbirds" which would suggest that they are represent a seasonal form of reverse migration. This is reinforced by the fact that "Sunbird" rates are highest for the permanent migrants to Arizona who came from Northern states. Moreover, these same results are also consistent with a hypothesis that as a Minnesota, or any Northern state, household ages it makes a transition from "Snowbirding", to permanently migrating to the Sunbelt, and then engages in "Sunbird" activity. It is possible that a final lifetime migration sequence is permanent migration from the Sunbelt to a Northern state in very old age. However, the surveys conducted in Arizona and Minnesota are unable to directly verify this last transition, though others have done so using Census data.

Indirectly, the age specific data for each state in Table 4 do indicate that North to South permanent migration occurs right after age 65 in that the Minnesota sample for the 66-68 cohort is significantly lower than the 62-65 cohort while in Arizona these cohorts show the reverse pattern (i.e., the 66-68 cohort is larger than the 62-65 cohort). Likewise, South to North reverse permanent migration is indicated by the faster decline of higher age cohorts in Arizona than in Minnesota.

What we have hopefully accomplished in this paper is to raise the awareness of elderly seasonal migration as a phenomenon and, more specifically, to recognize the importance of "Sunbirds". Our results suggest that "Sunbirding" and "Snowbirding" may well be part of a complex pattern of migration, both seasonal and permanent, that is engaged in by many households in later life. However, these linkages have not been explored, in part, because Census data provide very little information regarding seasonal migration. In fact, most of the work on elderly migration has concentrated on permanent migration because of the abundance of Census data.

Our approach, using origin-based data, suggests that seasonal elderly migration is important and that more attention needs to be paid to it. Ideally, data might be collected for a sample of households which would allow for direct determination of the sequencing of migration activity, both seasonal and permanent, over a lifetime (e.g., panel study). However, even if this were to be initiated for those reaching 60, it would take 25-30 years to completely document the sequencing of elderly migration. In the meantime, surveys conducted in other origin states, both South and North, will serve to verify and expand on what we have found regarding the seasonal migration activity of elderly households in Arizona and Minnesota.

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TABLE 1

BASES OF PREVIOUS STUDIES OF ELDERLY SEASONAL MIGRATION

Based on 1980 Census (non-residency status):

1. "Snowbirds" (landing in) -

Arizona:	Hogan (1987), Hogan and Steinnes (1993a), Steinnes and Hogan (1992)
Florida:	Longino and Marshall (1990)

2. "Sunbirds" - NONE

Based on Survey Conducted in Destination State:

1. "Snowbirds" (landing in) -

Arizona:	Sullivan and Stevens (1982), Monahan and Greene (1982), Sullivan (1985), Happel, Hogan and Pflanz (1988), McHugh (1990)
Florida:	Hoyt (1954), Tucker, Marshall, Longino and Mullins (1988)
Texas:	Rush (1980), Martin, Happel, Larson and Leon (1987)

2. "Sunbirds" - NONE

Based on Survey Conducted in Origin State:

1. "Snowbirds" (flying from) -

New York:	Krout (1983)
Minnesota:	Hogan and Steinnes (1993b,c)

2. "Sunbirds" - NONE

TABLE 2

SAMPLING PROCEDURES FOR ORIGIN STATE SURVEYS OF ELDERLY SEASONAL MIGRATION ACTIVITY

ASPECT OF SURVEY	ARIZONA	MINNESOTA	NEW YORK
1. *Sponsors of Survey*			
a. Aging agencies	State	Regional(13)	County(1)
b. Foundations	No	Yes (6)	No
2. *Purpose of Survey*			
a. Needs assessment	No	Yes	Yes
b. Develop research database	Yes	Yes	No
3. *Survey Sampling Procedures*			
a. Sample size	1228	1500	1279
b. Geographic area	Statewide	Statewide	Single County (non-metro)
c. Age criterion	60 or older	60 or older	60 or older
d. Sampling period length	12 months	5 months	10 months
e. Sampling time period	2/90 to 1/91	6/88 to 10/88	6/78 to 3/79
f. Method	Interview	Interview	Interview
4. *Survey Information on Seasonal Migration*			
a. Number of questions	15	17	3
b. Seasonal Migration Criteria			
-Destination	out of state	out of state	in/out-state
-Length of stay/year	4 wks in a row	5 wks in a row	8 weeks
c. Sample meeting criteria	124	138	176
d. Percent meeting criteria	10.1	9.20	13.76
e. Length of migration stay	Yes	Yes	No
f. Months of migration stay	Yes	Yes	No
g. Destinations (number)	No	states(49)	regions(7)
h. Destination housing type	No	Yes	No
i. Past migration activity	No	Yes	No
5. *Other Survey Information Available*			
a. Outstate travel activity	No	Yes	No
b. Demographics	Yes	Yes	Yes
c. Income/Employment	Yes	Yes	Yes
d. Housing(at origin)	Yes	Yes	Yes
e. Transportation	Yes	Yes	Yes
ASPECT OF SURVEY	**ARIZONA**	**MINNESOTA**	**NEW YORK**
f. Activities	No	Yes	Unknown
g. Health	No	Yes	Unknown
h. Social Support	No	Yes	Unknown
i. Volunteer Activity	No	Yes	Unknown
j. Functional Status	No	Yes	Unknown
k. Worries/Concerns	No	Yes	Unknown

TABLE 3

ARIZONA "SUNBIRDS"

ELDERLY SEASONAL MIGRATION RATE

By Origin of Permanent Migration

ORIGIN OF PERMANENT MIGRATION	SUNBIRDS	NON-SUNBIRDS	TOTAL	MIGRATION RATE
Not in U.S.	2	39	41	.049
Canada	2	6	8	.250
Mexico	0	20	20	.000
Other	0	13	13	.000
U.S.	118	923	1041	.113
Washington	9	15	24	.375
Minnesota	10	23	33	.303
Oregon	4	10	14	.286
Pennsylvania	8	22	30	.267
Iowa	5	14	19	.263
Wisconsin	7	22	29	.241
Colorado	5	33	38	.132
Other (rate under 10% or sample under 10)	90	784	830	.108

TABLE 4

ELDERLY SEASONAL MIGRATION RATES

By Age

AGE GROUP	ARIZONA SUNBIRDS	NON-SUNBIRDS	TOTAL	MIGRATION RATE	MINNESOTA SNOWBIRDS	NON-SNOWBIRDS	TOTAL	MIGRATION RATE
60-62	14	159	173	.081	9	184	193	.047
63-65	16	158	174	.092	30	234	264	.114
66-68	14	181	195	.072	26	171	197	.132
69-71	26	172	198	.131	28	174	202	.139
72-74	20	125	145	.138	11	141	152	.072
75-77	19	98	117	.162	14	120	134	.104
78-80	8	79	87	.092	4	111	115	.035
81-83	3	69	72	.042	8	66	74	.108
84-86	2	41	43	.047	1	59	60	.017
87-105	2	22	24	.083	3	64	67	.045
ALL	124	1104	1228	.101	134	1324	1458	.092