

Preparing the Appalachian Region of the United States for a Large-Scale Inflow of Climate Migrants

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Abstract

As climate change damage increases across the United States, the Appalachian Mountain Region may become the primary area available for in-migration by endangered American residents. However, the culture of this region differs from that of the areas in which many endangered residents now live. The present research examines these cultural differences and identifies important social norms and personal values that will likely impact the success or failure of relocation for endangered Americans to the Appalachian Region.

Keywords

US Climate Change Migration, Appalachian Region, Cultural Adaptation

1. Introduction

The past five years in the United States have been the most climate-challenging in the country's history [1]-[3].

Figure 1 below (New York Times 2026) depicts the current climate challenges across the United States. The states of **California**, **Texas**, and **Florida** have experienced the worst of these climate-change damages. "40% of costs resulting from climate-driven extreme events between 1980 and early 2025 occurred in three states—California, Florida, and Texas." [4]-[6].

In the unlikely event that **all** the current residents of these states were forced to relocate due to climate change, this would require the transfer of almost 100 million persons to safer living areas. With a current US population of approximately 344 million persons, this implies that over a quarter of the population

would need to be relocated [6]. More realistically, if **only half** of these three states' populations required relocation, 50,000,000 Americans would need to find new homes somewhere in the country. Where can they go? The most viable area of climate change refuge in the United States is likely to be the Appalachian Mountain Range [7].

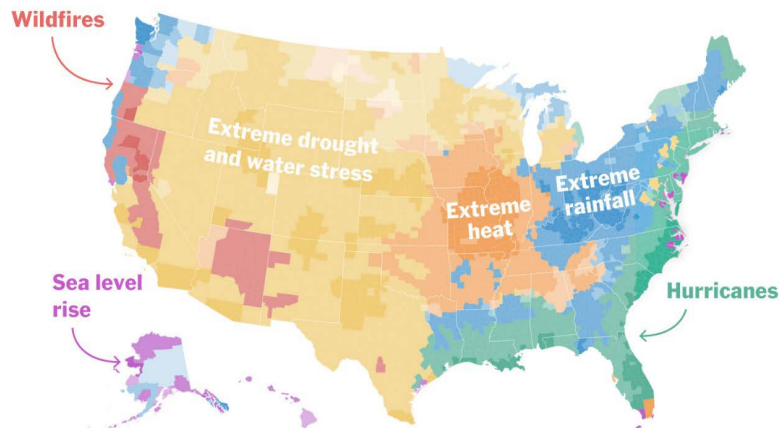


Figure 1. Current climate change dangers in the United States (New York Times, 2026).

2. The Appalachian Mountain Range as a Climate Migration Destination

Shown below in **Figure 2**, the Appalachian Mountain Range stretches from northern Georgia and Alabama upward to New York State, Vermont and Maine. Covering an area of 205,000 square miles, this region of the United States is forecast to likely remain the most climate-safe area of the Continental United States in the present and future [8]. The maximum elevation in Appalachia reaches 6684 ft and across the range there are a variety of temperate, subtropical areas which make it suitable for supporting a diversity of crops and animals.

At present, the population of this region is 26,300,000 persons [9]. Appalachia could potentially support 25,000,000 to 30,000,000 additional persons, if sufficient acreage is left to grow crops and support food animals [10].

Prior research has investigated the possibility of constructing Climate Change Haven Communities in Central Appalachia [11], but has not yet taken a detailed look at Appalachian culture. A deeper examination of the culture, social norms and personal attitudes of the people now living in the Appalachian Region is needed to ensure that appropriate preparations can be made prior to the arrival of Americans from climate-endangered areas of the country.

Failure to properly prepare both current residents and incoming migrants for this transition could lead to hostility and purposeful non-cooperation, which has already occurred in several European countries and Canada due to in-migration [12]-[17].



Figure 2. The appalachian mountain range.

3. What Is Appalachian Culture?

Traditional conceptions of Appalachian culture usually focus on embedded stereotypes and historic treatises [18]-[21].

Among these are the L'il Abner hillbilly, Dogpatch town and Yokum family created by cartoonist Al Capp in the 1950's. The image in **Figure 3** below shows the apparel, homes, and landscape depicted in the Lil Abner cartoon and comic book series. The characters live in log cabins, are dressed in ill-fitting clothing, have coon hounds as pets, drink moonshine whisky from kegs, and eat possum.

A television series, "The Beverly Hillbillies", broadcast from 1962 to 1971, carried these same stereotypes forward [22]. The show featured an Appalachian family who had struck oil on their property and moved to Beverly Hills, California in their truck. **Figure 4** below shows the family's arrival at their new home. Several stereotypes from the Lil Abner series were carried over into this show: the pipe smoking grandmother, hunting rifles, and the beautiful, blonde hillbilly woman and handsome, dark hillbilly man.

Current treatises on Appalachian culture present a more positive set of characteristics. For example, "To understand Appalachian culture's values and beliefs, consider the following key aspects: strong emphasis on family and community



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These characterizations are broadly consistent, but because they reside at an

abstract conceptual level, they are not useful in determining whether climate-endangered Americans from areas outside Appalachia would be welcomed into the Region. The qualitative study reported below is intended to provide useful insights into the response of Appalachian residents to incoming climate migrants from outside their region. This will enable appropriate communications to be developed for both current residents and incoming migrants that enable a positive response by both parties.

4. Methodology of the Study

In order to create a more detailed understanding of current Appalachian residents' attitudes regarding climate change and the potential inflow of endangered Americans, personal interviews and participant observation studies were conducted with residents in the mountainous regions of Tennessee, Virginia and North Carolina. The goal was to examine more closely the potential responses of residents to the in-migration of Americans from climate-endangered regions of the United States. For example, would the purported helpfulness and generosity attributed to Appalachian residents be extended to persons from outside their Region? What types of people—in terms of occupation, age, regionality, ethnicity—would current Appalachian residents find acceptable as new neighbors? What types of people might be viewed with suspicion and animosity?

Trained researchers who had taken college-level courses in qualitative research methods and were currently residing in the Appalachian Region were tasked with interviewing and observing residents in multiple venues during the late winter and early spring months of 2026. ([springer.com › rwe › 10Qualitative Interviewing | Springer Nature Link](#))

The interviewers followed a protocol developed for the present study ([methods.sagepub.com › hnbk › edvolQualitative Interviewing Techniques and Styles](#)). This protocol instructed them to inform the interviewee that the study was being conducted to gain an understanding of present Appalachian residents attitudes towards in-migration by American citizens from climate-endangered areas of the United States to Appalachia. At the outset of the interview each respondent was asked about their views on climate change and its impact on the United States and their own Appalachian Region. The researchers then queried their respondents about the possibility that “Americans from climate-endangered areas of the country might be relocating to this area.” Would the interviewees be favorably or unfavorably inclined to this in-migration, in general? The term “climate-endangered” was explained as “weather events that could lead to loss of one’s home and/or business”. Examples given included floods, tornadoes, hurricanes, droughts, blizzards and forest fires. If they responded “favorable”, they were then asked “what types of people would you like to have move to this area” and “why would these people be desirable”. If they answered “unfavorable” they were asked “What types of people would you not like to move to the area?”

A last set of topics explored developing sustainable local food sources that could

be used to feed the increased population, as well as current residents. Among these were the use of **agroforestry** and **silviculture** which could provide regional farmers and land owners with an increased opportunity for income, as well as reducing the region's need to for outside food shipments by rail and diesel trucks, as these would be damaging to the regional environment. Responses to these issues are addressed in the closing section of each interview.

Researchers then made additional visits to places where local residents congregated, especially on weekends, to observe their patterns of interaction. This was done to provide accurate documentation of group composition, social interaction patterns, apparel preferences and vehicle preferences. These observations provided key information on social interaction patterns and social group composition across different ages and genders. Understanding the regional apparel, vehicle preferences and social interaction patterns could provide valuable knowledge for preparing communications in support of a positive response to the incoming American migrants.

Representative interview reports and participant observation notes composed by five of the researchers are presented below in order to illustrate the interpretive interaction between respondent and investigator, both of whom belong to the same culture. Areas of consistency and inconsistency in their reports are discussed and a set of recommendations is developed for use in developing an effective communication strategy directed toward residents and migrants.

4.1. Researcher #1 Report

The first interview was conducted with a resident of Southwest Virginia who is a male in his early 40s. He stated that he has not seen a large change in the weather of Southwest Virginia since climate change has become a discussed issue. He believes the area is fortunate to be relatively untouched as of right now, although the weather seems more unpredictable from year to year. However, he believes that this is "normal" for the area. He believes that climate change is a very important topic and does affect many regions of the United States. He would like to see these regions receive help.

If governmental support is provided for relocating climate-endangered citizens to Southwest Virginia, he would be very open to the idea and stated, "I hope to help the people if they do migrate here; we have many resources and could help them rebuild the West (*i.e.*, Western United States) and hopefully get them back home one day." He also expressed his opinion on West Coast/California citizens being relocated here, saying: "I've spent time over on the West Coast; they live in a fast-paced environment. I worry they may not adjust well to the lifestyle of the Appalachians."

Interview 2

A female college student stated that she "did not know much about climate change, but wants to learn more...Climate change was never something I was taught about growing up and I never heard it mentioned in my personal spaces,

so I never thought about it.” When asked how she would feel about American climate change refugees moving to the area, she explained that “it would be nice to have new kinds of people around, but they would have to be willing to accept the area for what it is and respect the culture and space.” She enjoys “meeting new people and has always looked forward to the growth of my small hometown... I would love to see what cool new ideas could do for this town. We are so small with so much potential. Growth is slowly showing; we’re even getting a 5Below store (a discount variety store).”

Interview 3

The interviewee was a female administrator from Kentucky. She stated that as a resident of Appalachia she “was never made aware of climate change, because it never personally affected me locally”. She continued, “I now believe in climate change and that it is deeply affecting our country.” When asked about American migrants arriving from the Western states and California, she acknowledged that “people of such different lifestyles and beliefs might be difficult to have around here...People out there are so different from us. I fear they would not respect us and our lifestyles and try to change what makes this place so special. I do not see how this (in-migration) would benefit the people who already live here”. In closing, she stated, “those people in California did this to their climate; what would stop them from doing it to ours.”

Interview 4

The last interview was conducted with a young college student from Tennessee. He made his stance on climate change very clear: “I believe that climate change is real; however, I don’t believe the media are completely truthful; the news on climate change is made to be more dramatic to make people fearful.” With regard to American climate change refugees possibly moving to Appalachia, the interviewee responded that “it would be a good solution for them, but I don’t think that the people from the West would want to come to this rural area, and if they did, they would make us miserable with their complaining and want to change the area.”

The researcher also mentioned to the interviewees that new animal species, such as elk and bison, might be introduced to the Appalachian Region to help provide a local, sustainable food supply. This received a positive response from most. As the last respondent noted, “I’ve always worked on farms with livestock; I would find it fun to learn to care for new animals and have them around.”

4.1.1. Commentary on the Interview Themes Identified by Researcher 1

Throughout the interviews by Researcher One, two major themes emerged regarding climate change and climate change migrants. The first was the **relative lack of information** possessed by the interviewees on climate change. Because of their location in Appalachia, climate change has never deeply affected most of the residents; this seems to have led to lack of knowledge and interest on the subject. In order to successfully provide climate safe havens for incoming migrants, potential developers would first have to educate the current population, explaining why creating climate safe communities are necessary and desirable as a safety

measure and that population inflow from endangered US areas could improve the local economy with desirable businesses and residents.

A second prominent theme is the relatively common fear that incoming climate migrants, especially from California, will not respect the land, people, or culture. Respect is a corner stone in the Appalachian culture and it is vital that new arrivals be made aware of this if they want to be welcomed. The key to success for new migrant communities will be building mutual trust between the new and current residents. Otherwise, local residents may actively oppose having new people in their communities. Climate change migrants will need to be informed that the lifestyle here is genuinely different from their own and the key to their becoming accepted community members is adapting to these norms.

This same researcher also conducted several on-site observations of the local communities to better understand Appalachian social interaction patterns.

4.1.2. Observation 1

The first participant observation was done at a college basketball game. I have been frequenting basketball games for many years. There is a strong sense of community here. Many of the attendees at the game were not parents of the players, but rather local supporters of the college. This was especially notable given that that it was 25 degrees outside.

4.1.3. Observation 2

A second observation site was the local Mexican restaurant on Saturday evening. There were many large, multi-generational families sharing dinner together. Similarly, large groups of college students were also gathered at tables. At each table stories and laughter were being shared, creating a sense of camaraderie. Throughout the restaurant there was a sense of genuine community; it seemed as though no one was a stranger. This highlights how deeply our community residents are intertwined.

4.1.4. Observation 3

A third observation was at a local coffee shop. This observation was quite different than at the other settings. Individual customers were seated in a quiet, slow-paced environment, staying more to themselves in order to get their work done and have personal time. The interviewer interpreted this as follows: “To me this showed how despite living in a tight-knit community people, still crave peace and quiet in a space like a coffee shop where respect for individuality is shown. This supports the idea that the community is heavily rooted in respect for those around them.”

An alternative interpretation of this same coffee shop scene—which is commonly found in large US cities such as New York, Chicago, and Boston—is that in heavily populated areas, the sense of “shared community” is actually substantially weakened. The foot traffic on sidewalks in New York during rush hour, though extremely dense, consists of individuals who are essentially strangers to one another. Though surrounded by other persons, each individual is profoundly alone [25] [26]. The researcher, who has only lived in Appalachia, uses his/her

personal perceptual “schema” to interpret this aloneness in a positive, community-based frame (see **Figure 5** & **Figure 6**).

The photos below were taken by the interviewer. Note the casual apparel styles and farm vehicle. The thumbs-up signals were made in response to the interviewer’s question about the potential arrival of climate-endangered Americans to their area of Appalachia.



Figure 5. Photo by researcher 1.



Figure 6. Photo by researcher 1.

4.2. Second Researcher Report

Four Appalachian residents were interviewed about climate change and potential in-migration to the area. They included two women lacrosse coaches, ages 23 and 44, and two female college students, ages 18 and 21. The interviews indicated mixed levels of knowledge about climate change, but generally positive attitudes toward new arrivals from outside Appalachia with a specific caveat: “if they help

the community and economy” they will be welcome. “I think most of us want to see the area do better, but still have it feel like home”.

When discussing climate change, the answers varied across respondents. The 23-year-old athletic coach stated that she does not have an opinion on climate change and does not know what climate change really is. “I’ve heard about it, but I don’t really know enough to say anything strong about it.” She has noticed that the Appalachian area is getting colder periods during the winter, but does not fully understand why this is happening. The 44-year-old athletic coach stated that “climate change is real and a big problem that it is hurting the world by causing severe weather and forest fires. You can’t ignore what’s happening anymore; the weather has gotten much more unpredictable”.

The two college students interviewed believed that “climate change is real and is mostly caused by humans. It makes weather more extreme and people should try to reduce pollution in hopes it will help. It feels like every year things get a little more extreme,” one student said; the other added, “Even small changes could make a difference, if people actually tried.”

When asked about people moving to Appalachia from climate-endangered areas of the United States, those interviewed were mostly supportive. The younger coach commented, “It is okay as long as it is legal and helps families stay safe. If people need somewhere safe to go, why not here?” The older coach commented that “Appalachia needs more people; these new residents can bring new ideas and help the area grow. We’ve been losing people for years, so new faces could really help.” The college students also believed bringing more people to the Appalachian Region would help the economy and population. “More people means more opportunities for jobs and businesses,” one stated.

When queried directly about what “types of people” they would like to see move to Appalachia, the assistant coach said she would like to see “entrepreneurs and people with dreams who want to build businesses and improve the area. People who actually want to start something here would be amazing,” she said. The older coach said she would like to “see the kind of people who want to help the community. We need people who care, not just people passing through.” One of the college students commented she would like to see “young workers, small business owners, and people who want to build a life in the area... People our age who want to stay and grow something here would make a big difference.”

At the close of each interview, participants were asked what types of people they would not want to move to Appalachia. The young coach said she “would not want dangerous people or people struggling with drug addiction. We already deal with enough of that; we don’t need more problems”. The older coach said she would not want people who “take advantage of the system, hurt the economy, or do not care about the area, especially the forest area. If they’re not going to respect the land or the people, they shouldn’t come.” The two college students did not want “people who use local resources, but do not give back or respect the community. It’s frustrating when people take and don’t contribute anything.” (see **Figures 7-9**)



Figure 7. Two Appalachian residents and their vehicles. Photo SDH copyright.



Figure 8. Photo of an Appalachian town’s main street. Most businesses are locally-owned. Copyright SDH.



Figure 9. Appalachian shoppers at a local supermarket. Copyright SDH.

Major Themes

One of the primary themes underlying this second set of interviews was: community preservation, while balancing growth. The respondents all shared the desire of wanting their area to grow more prosperous, but feared the loss of “community”—that is, a sense of shared values and identities. “Growth is good, but not if it changes who we are,” as one respondent put it. Along with economic growth they also want to “preserve the community’s shared values and unity”. New residents would be welcomed, but expected to contribute to the community’s overall well-being.

While there was an overall desire for more businesses and young workers to invest in the area, these new arrivals should be “people who are here for the long run.” Concerns were also raised regarding crime and drug distribution—two problems that have been endemic in Appalachia for the past several decades [26]. As one respondent put it: “At the end of the day you just want the region to prosper.”

4.3. Third Researcher Report

The four interviews below were conducted with Appalachian residents of varying ages and income levels.

Woman Retired from Teaching, Secretary for Local Coal Company

This interviewee believes that “humans may be creating climate change, especially in the big cities”, but also notes that climate cycles have been seen across history: “The weather is unpredictable and warmer some years than others.”

The interviewee has already met several new people who have moved to Appalachia from climate-endangered US coastal areas. She stated, “It is good for people to move to this area for tax and/or climate reasons. If they are productive and respectful, I am perfectly okay with it. It can boost our economy.” She would like to see more “professional people move here to contribute to the uprise of the economy and put their kids in our schools and keep them running.” As a potential food source for these new arrivals, she advocates the re-introduction of game animals (e.g., elk, deer, bison) as sustainable food sources across Appalachia.

This respondent comes from a coal-producing family and “hopes that coal (mining) can come back for use in steel production, (because) this can be used for the military.” Notably, the coal industry has been in steep decline for the past several decades, largely because coal-burning is a large-scale contributor to climate change. This respondent justifies her support of the coal industry by tying coal fuel to military readiness.

Woman: HR Secretary of Recruitment at an Appalachian State Prison

This interviewee believes “people do have an impact on climate change. There has been a definite change in the weather.” An attitude she held in contrast to other interviewees already discussed, is that “people moving in from different areas could bring their ideas from which we can learn something, like how they garden.” She was also in favor of “a well-established industry that can move here and bring in more money to these counties.”

When asked about using agroforestry as a sustainable food source across the Appalachian Region, she fears it may be “too costly to do; it would need to generate a good income (for the farmers).” However, she is also concerned that agroforestry may result in the “animals getting loose and causing accidents, like the deer already do”.

Biology Student at Local College, Cashier and Stocker at Local Supermarket

This interviewee believed that “the world is mostly just going through the climate cycles that have been seen throughout history, but humans could be having impacts on the current weather making it more drastic.” This view, sometimes termed ‘climate change denial’, seems to be relatively common among some Americans [27]-[31].

One of the problematic issues connected to this belief is that even if the current intensifying of climate events across the planet is “only” a temporary readjustment that lasts perhaps a century, many of the planet’s current species—plants, humans, animals—would be seriously impacted and some would likely become extinct [32].

This interviewee also expressed concern about the agroforestry reintroduction of bison and elk as Appalachian food sources “because they could cause even more accidents than we already have with deer.” However, he also believed that “bison would be a healthier (meat) alternative than cattle.” In closing the interview, the respondent expressed concern that “having more people moving here could result in overcrowding the land.” Ironically, many residents in Appalachia desire the presence of more industries and job opportunities, but simultaneously fear the Region becoming “too crowded”.

High School Principal

This respondent “believes that humans have an impact on climate change, but not as much as many climate change activists suggest. The weather is cyclical and is (now) similar to how it was when I was younger.” Regarding population in-flow from climate-endangered areas of the United States, he stated: “I am fine with people from Arizona, Texas, the Gulf states, and Florida moving to this region, but not California because their cultural dynamic is not always parallel with ours.” This attitude was expressed before in the interviews already presented. Americans from the Southeast and West (*i.e.*, Texas, Arizona) are generally viewed by Appalachian residents as similar to themselves in culture and values, whereas California is “a bridge too far”—*i.e.*, having a culture and lifestyle that is too inconsistent with their own.

As with other interviewees, he expressed approval of “ranching” deer, elk and bison, but was concerned that they must be properly fenced and “not allowed to run free and cause accidents. I am perfectly fine with people making money and creating job opportunities off farming deer and I feel the same about bison and elk, due to the opportunities to increase jobs and money.”

4.3.1. Researcher 3: Themes Identified

The first theme this researcher noted is the “importance of land and heritage in

Appalachian culture. The residents I interviewed often view their land as a family legacy, not just property. Multigenerational agricultural practices on the land are tied to personal and familial identity and pride”. The researcher also noted that “the expanded use of agroforestry would represent a return to traditional Appalachian land-use practices because, historically, families in the region integrated trees, livestock, and crops in diversified systems long before industrial monoculture became common.” **Figure 10** below shows Appalachian women engaging in agroforestry.



Figure 10. Appalachian residents engaging in agroforestry: civileats.com.

A second major theme the interviews revealed is the importance to residents of economic stability and having local employment opportunities. If incoming climate migrants bring with them companies in which Appalachian residents can find well-paying employment, it will make their arrival much more attractive to the local population.

A third theme is an emphasis on self-reliance. Several interviewees were concerned that an influx of “outsiders” might cause the region to become overly dependent on external systems. Community cohesion was another important theme; constructing Climate Change Haven Communities should be presented as a way of strengthening community bonds by creating shared gardens and cooperative farming opportunities. Finally, a common concern among all those interviewed are the feelings of worry and skepticism about outside intervention.

Appalachian cultural values are deeply rooted in land, independence and close-knit community relationships; these values underlie how people make decisions and how they interpret options. The most deeply-held value appears to be the importance of **land as identity**. Appalachian land is not just property, but represents family history, generations of hard work, and family pride. Land stewardship is a primary concern for Appalachian people; all four interviewees expressed a desire to keep their own land productive and beautiful for their children and grandchildren.

A final theme was economic concern as Appalachian residents confront the fi-

nancial challenges currently facing the region. The lack of well-paying, professional jobs has caused many gifted young people to leave for opportunities elsewhere. This has created a strong desire to find effective ways to revitalize the economy, while still keeping their Appalachian cultural identity intact.

4.3.2. Participant Observation Report

1) Observation Site #1. Small Town Business District

The first participant observation took place in a small downtown area in Appalachia. Public spaces included locally-owned stores and a coffee shop. The social environment was informal and community-oriented, with residents interacting casually. Data were collected through participant observation, informal conversations, and handwritten field notes. Rapport was established by engaging in casual conversation and spending time in shared public spaces.

People demonstrated a strong sense of local identity and familiarity with one another. Conversations often included topics such as family, work, and concerns about economic change. People expressed pride in the Appalachian Region and its traditions. There was noticeable skepticism toward outsiders, but this was balanced by friendliness, once trust was established. Language use included regional expressions, and humor played an important role in social interaction. “Everybody knows everybody here — that’s just how it’s always been”.

2) Observation Site #2: Another Downtown Area

This observation site was a larger Appalachian town which features several restaurants and public gathering areas. The context was more active and diverse, with both locals and visitors present, likely because this is a larger city. Participant observation was used along with informal interviews and field notes. Rapport was established through casual conversation and shared presence in public spaces.

Compared to City 1, City 2 showed a mix of traditional Appalachian culture and newer influences. Local people appeared more open to outside visitors and social change, especially those related to tourism and business growth. Conversations reflected optimism about current and future economic development, but also concern about maintaining local character. Music, local history, and regional pride were common discussion points. People emphasized the importance of balancing progress with tradition. “We want growth, but we don’t want to lose what makes this place ours.”

3) Observation Site #3: A Rural Community Gathering

This setting was smaller and more informal than the two prior observation sites. The residents emphasized their strong belief in “faith and family”. Conversations focused on land, farming, and local politics. Here there was a much stronger presence of regional Appalachian speech patterns, shared forms of humor and a strong emphasis on ‘helping out’ those nearby who were having problems and needed support. Residents spoke about protecting their land for future generations. There was concern about “outside investors” buying large amounts of land. This would mean a loss of control for the current residents. Quote: “We take care of our own around here.”

Overall Findings

There are five central values that need to be accommodated in order for Appalachian residents to respond positively to an inflow of Americans from climate change-endangered areas of the country. These are:

- 1) Supporting the strong shared identity among Appalachian residents.
- 2) Recognizing the centrality of land and family to Appalachian identity.
- 3) Residents are open to gradual, community-led change. but will actively resist aggressive external efforts to alter their way of life.
- 4) Economic growth is desired, but not at the cost of culture.
- 5) Trust must be built slowly and genuinely.

4.4. Researcher 4 Report

Interview #1, Female, Nurse

The interviewee believes climate change is “real and has already affected our local weather, especially through having warmer winters and stronger storms.” Although she is concerned about the future, she still feels Appalachia is safer than many coastal areas. She is receptive to “people moving from Texas, Florida, Arizona, and California, as long as they respect the community.”

However, she worries that too much rapid growth could raise housing prices and this would be “harmful to the people already living here.” She would like to see “more technology and healthcare companies move into the Region to create high-paying service jobs.” She supports expanding local farming and livestock, including agroforestry, because “this would strengthen the local economy and improve our regional food security.”

Interview #2: Male, Retired Teacher

This respondent believes “climate change is happening, but I think more education about its causes and effects is needed.” It has not changed his love for Appalachia, but has made him more aware of conservation. He understands that people are leaving “states like Florida and Arizona due to climate change” and welcomes newcomers, “if they respect our local traditions.” He is cautious about the introduction of “cultural and political differences these newcomers might bring to Appalachia”. He would especially welcome companies such as “educational services, small technology companies, and medical offices”. He does not support large factories that could damage the environment. He would support agroforestry farming “if it follows environmental rules.”

Interview #3 Female, Nurse

This respondent believes “climate change is a serious issue that affects public health, especially through heat-related illness and allergies”. She feels “relatively safe in Appalachia, but worries about flooding and storms.” The interviewee supports “people moving here from other states, if they contribute positively to the community”. She believes some newcomers bring “helpful ideas and new businesses”. The respondent would like to see “more hospitals, clinics, and health-related companies in the area”. She strongly “supports local farming, because it

provides fresh and healthy food.”

Interview #4: Male Farmer

The respondent believes climate change “has made weather in Appalachia more unpredictable, which affects crop production”. He is especially concerned about periods of drought and heavy rainfall. He “would welcome people moving from other states, but I want growth to happen slowly, so it does not overwhelm our local culture.” He worries that a “rapid increase in population would create rising housing prices and loss of farmland”. This interviewee would “like to see more agriculture-related businesses, food processing plants, and equipment companies” move to Appalachia. He supports expanding livestock agroforestry “as long as it is managed responsibly”.

These four interviews are largely consistent across the set of respondents. They indicate that current Appalachian residents believe climate change is affecting their community and do support responsible growth. While each interviewee has different priorities, all agree on the importance of protecting the environment, supporting local businesses, and welcoming new residents who respect local traditions.

4.5. Researcher 5 Report

The report prepared by Researcher #5 uses a different format than the previous four researchers. This researcher’s analysis is presented below.

Four interviews were conducted with individuals of varying ages, genders, occupations, and life experiences to gather perspectives on climate change and migration in the Appalachian Region. The primary themes found are presented below in order of emphasis in the interview set.:

Belief in Climate Change

All participants expressed the belief that climate change is real and observable. Long-term residents noted changes in seasonal weather patterns, while younger participants focused on recent extreme weather events such as flooding, heat, and severe storms.

Emotional Impact

Climate change has created feelings of concern and uncertainty among all participants. While most expressed a strong attachment to their communities, some questioned the Appalachian Region’s long-term sustainability without substantial infrastructure improvements; these are needed to remedy flash flooding and protect people and livestock during extreme cold and hot weather periods.

Migration Patterns

All four interviewees believe the Appalachian Region will likely attract retirees, families, and individuals relocating from climate-stressed states. However, concerns were raised about the impact this would have on housing costs and local resources, such as electricity, medical care, and governmental services. Notably, these interviewees did not name specific types of people or states from which they would oppose in-migration.

Suggestions and Recommendations

The interviewees suggested that more effort should be made toward investing in infrastructure improvements, especially drainage and road systems, planning for controlled population growth, improving emergency preparedness and balancing economic development with the preservation of community identity.

Gender	Age	Occupation
Male	26	Teacher & Coach High School
Female	22	Retail Associate
Female	74	Retired
Male	34	International Project Consultant

Participant Observations

While spending time in a downtown area, I noted that locally-owned businesses dominate the space, rather than large national chains. People frequently greet one another by name, and conversations often happen casually on sidewalks or inside stores. Community bulletin boards advertise local events, school functions, and church gatherings, indicating a high level of community cohesion. This indicates that Appalachian residents value close social connections and community loyalty. There is a strong emphasis placed on supporting small businesses and maintaining long-standing relationships. The pace of life appears slower and more relationship-focused as compared to large metropolitan areas, indicating that social ties are prioritized over efficiency or individuality.

Small Appalachian College Campus

Here it was evident that many students balance their academics with athletics, part-time jobs, and family responsibilities. Faculty and students interact in a more informal and approachable manner as compared to large universities. Campus events often incorporate Appalachian heritage and celebrate regional pride. This reflects the value placed on higher education as a pathway to economic opportunity. Many students appear to be first-generation college attendees, suggesting that higher education is seen as a practical tool for upward mobility, rather than just personal enrichment. The strong work ethic among students highlights the importance of responsibility and perseverance within the community.

Walmart Supercenter

At the local Walmart Supercenter, it was readily apparent that the store functions as more than just a retail location; it is a social-community center. People frequently stop to talk to each other in the aisles or near the entrance, and many shoppers appear to know the Walmart employees personally. The parking lot also often serves as a casual meeting place, and individuals of all ages gather there regularly to discuss sports games, the weather, and upcoming social events.

In smaller Appalachian towns, major retail stores such as Walmart seem to serve as informal social hubs. Economic practicality was evident in the observed shopping behavior, but was interlaced with moments of social connectedness.

This reflects a lifestyle where *communitas* and pragmatism coexist, where public spaces become central to supporting social life. A photo of a Walmart shopping center in Appalachia is shown in **Figure 11**.



Figure 11. Walmart Shopping Center. copyright SDH.

5. Discussion and Conclusions

The goal of this study was to examine more deeply the potential impact of American climate change migration on the Appalachian communities that will be pressed into service. The Appalachian Region will likely become the primary receiving area for those American citizens who can no longer remain in their current locations. Often, particularly in the United States, research emphasis has been placed on assisting climate-endangered citizens with the difficult process of leaving their homes and moving to safer parts of the country, while the impact of this population movement on their destinations remained uninvestigated [33]-[38].

With most of the anticipated American internal migration moving from the Western states toward the climate-safer areas of the Appalachian Mountain Region, it is vital that the current residents of this area be prepared for a large-scale increase in population by 2035. At present, very little preparation has been made to accommodate this anticipated tide of people [8] [39]-[42].

The research reported here is one of the first efforts to investigate the attitudes and beliefs of current Appalachian residents about these incoming American migrants. Across interviewers, age groups, genders and economic strata, the present study suggests that current residents have generally positive attitudes toward immigration. However, these attitudes are consistently tempered by concerns that the new arrivals could disrupt the social and community ties that are the linchpin of Appalachian culture.

Most of those interviewed support the arrival of Americans who they believe could bring an economic boost to the Region. Well-paying service jobs, financial

investment to upgrade infrastructure such as roads, housing, administrative services, medical care and improved education facilities would all be welcomed. What is viewed with concern is that these improvements may simultaneously raise taxes, increase home prices and initially overextend existing public services in the Appalachian Region.

On a deeper, emotional level, residents voiced anxiety about the loss of their “culture, values and identity”. As many interviewees noted, what makes Appalachia special to them is the prevailing sense of neighborliness, of living in a shared and valued web of friendship, helpfulness, support and community. To many, this interwoven fabric of belonging is even more valuable than the promise of more income and more modernity.

And yet, it is also a stark probability that the majority of climate-endangered Americans will have to remake their homes in Appalachia in order to survive the onslaught of climate change in their current locations. They must move to a safer area of the United States, and Appalachia is presently (perhaps the only) viable candidate for relocation. Thus, a much-needed extension of this study would include the development of regional educational seminars that could be set up in various areas of Appalachia—college campuses could be an appropriate setting—to provide a public space for current residents to voice their hopes and concerns. These seminars should also include company representatives from western US businesses who would be given an introduction to the Appalachian culture in order to prepare their employees and their families for relocating to the region.

These seminars could also provide an opportunity for cross-cultural interaction and progress toward mutual understanding. When the company and its employees arrive, they would be familiar with the norms and values of their new community and will have already met local community leaders. This should ease the transition for both parties. Climate Change migration to Appalachia is going to occur—it already is. What is required now are efforts to make this migration as successful, happy, and harmonious as humanly possible.

The findings from this study are likely applicable to other countries having sparsely populated mountainous areas that can serve as Climate Change Haven Regions for their populations. As climate change pressures on highly populated coastal cities and/or southern extremities of those countries increase, their populations also will have to seek safer areas in more northerly and/or mountainous regions of the country. This pressure is already being experienced in France, Spain, Italy, Britain and several Baltic countries. It is likely that the people now dwelling in their rural, mountainous “safe haven” regions will also have feelings of both hope and concern about the large-scale arrival of their fellow citizens. It would be advisable for these countries to prepare their rural citizens for this large-scale population movement, just as in the United States.

Author Contributions

All authors contributed equally to the research portion of the manuscript. The

lead author additionally wrote the Introduction and Discussion and Conclusion Sections.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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