ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE
February 18, 2009
1:08 p.m.

MEMBERS PRESENT

Representative Craig Johnson, Co-Chair
Representative Mark Neuman, Co-Chair
Representative Bryce Edgmon
Representative Kurt Olson
Representative Paul Seaton
Representative Peggy Wilson
Representative David Guttenberg
Representative Scott Kawasaki
Representative Chris Tuck

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

OVERVIEW: BARLEY FOR FUEL

- HEARD

HOUSE BILL NO. 12
"An Act establishing the Alaska Council on Invasive Species in the Department of Fish and Game."

- HEARD AND HELD

HOUSE CONCURRENT RESOLUTION NO. 6
Recreating the Cook Inlet Salmon Task Force as a joint legislative task force.

- HEARING POSTPONED PENDING REFERRAL

PREVIOUS COMMITTEE ACTION

BILL: HB 12
SHORT TITLE: ALASKA COUNCIL ON INVASIVE SPECIES
SPONSOR(s): REPRESENTATIVE(s) JOHNSON, BUCH

01/20/09	(H)	PREFILE RELEASED 1/9/09
01/20/09	(H)	READ THE FIRST TIME - REFERRALS

01/20/09	(H)	RES, FIN
02/18/09	(H)	RES AT 1:00 PM BARNES 124

WITNESS REGISTER

BRYCE WRIGLEY, President
Alaska Farm Bureau
Delta Junction, Alaska
POSITION STATEMENT: Presented an overview regarding the production and use of barley for fuel in Alaska.

FRANCI HAVEMEISTER, Director
Division of Agriculture
Department of Natural Resources
Palmer, Alaska
POSITION STATEMENT: Answered questions regarding the production and use of barley for fuel in Alaska.

JEANNE OSTNES, Staff
Representative Craig Johnson
Alaska State Legislature
Juneau, Alaska
POSITION STATEMENT: Presented information in regard to HB 12 on behalf of Representative Johnson, co-prime sponsor.

MICHELE HEBERT
Land Resources Agent
University of Alaska Fairbanks Cooperative Extension Service
Alaska Invasive Species Working Group
Fairbanks, Alaska
POSITION STATEMENT: Supported HB 12 on behalf of the Alaska Invasive Species Working Group.

LORI ZAUMSEIL, Co-founder
Citizens Against Noxious Weeds Invading the North;
Coordinator, Anchorage Cooperative Weed Management Area
Anchorage, Alaska
POSITION STATEMENT: Supported HB 12 on behalf of the Citizens Against Noxious Weeds Invading the North (CANWIN).

DAN GILSON, Project Manager
Oil Spill Prevention & Response Operations
Prince William Sound Regional Citizens Advisory Council
Valdez, Alaska
POSITION STATEMENT: Supported HB 12.

SUE ELY, Legislative and Communications Manager

Alaska Conservation Alliance
Juneau, Alaska
POSITION STATEMENT: Supported HB 12.

ACTION NARRATIVE

1:08:26 PM

CO-CHAIR MARK NEUMAN called the House Resources Standing Committee meeting to order at 1:08 p.m. Representatives Neuman, Seaton, Wilson, Johnson, and Kawasaki were present at the call to order. Representatives Olson, Edgmon, Guttenberg, and Tuck arrived as the meeting was in progress.

OVERVIEW: BARLEY FOR FUEL

1:08:51 PM

CO-CHAIR NEUMAN announced that the first order of business would be an overview by Bryce Wrigley on barley for fuel in Alaska.

BRYCE WRIGLEY, President, Alaska Farm Bureau, stated that in addition to representing the Alaska Farm Bureau, he is a barley farmer in Delta Junction. He related that burning grain for fuel has been done for years in Europe, but is a new idea in the U.S. Barley can be easily grown in Alaska and developing its use as a fuel is a smart idea at this time.

1:11:00 PM

MR. WRIGLEY began his PowerPoint presentation by pointing out that one bushel of barley has the equivalent British Thermal Unit (BTU) output as 2.8 gallons of fuel oil [slide 2]. The price in Delta Junction for 2.8 gallons of fuel oil is currently $8.29, he said. The highest price for one bushel of barley is currently $5.52. One bushel of barley has 393,600 BTUs and one gallon of fuel oil has 142,393 BTUs [slide 3]. A barley-burning furnace and a fuel-oil furnace both have an 85 percent efficiency rating, he continued. Thus, heating with fuel oil costs about 50 percent more than heating with barley [$24.46 versus $16.50 per 1 million BTUs]. He translated these figures into a monthly cost for heating a 1,500 square foot home in Delta Junction [slide 4]: 100 gallons of fuel oil at a monthly cost of $296 compared to 0.6 tons of barley at a monthly cost of $138.

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MR. WRIGLEY said barley is probably the most renewable resource that can be grown in Alaska for fuel [slide 5]. Barley has a harvest/carbon cycle of one year as opposed to a harvest/carbon cycle of 100 years for wood from Interior forests. Burning barley produces much less particulates than burning wood so it would help communities stay within federally mandated particulate levels during inversions. Barley is a non-hazardous material so it can be safely stored and safely shipped to villages as a commodity, he continued. Another advantage of barley is that agricultural receipts generally turn over about seven times in a community as compared to oil which may turn over only once or twice before it leaves the state. Lastly, conserving oil within Alaska would make more of the state's oil available to the Lower 48 and help reduce U.S. dependence on foreign oil.

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MR. WRIGLEY explained that markets have always been the limiting factor to grain production in Alaska [slide 6]. Farmers have adjusted their production to those existing markets, he said, and last year about 4,000 acres were planted in barley in Delta Junction. If the existing markets were to increase, it would be possible to plant up to 18,000 acres within two years because barley is so easy to grow in Alaska. He said the capability is there to plant 25,000 acres of barley within three years. By 2015 an additional 25,000 acres will have come out of the conservation reserve program for a total of 50,000 acres potentially available for planting barley. [Mr. Wrigley later specified that he used Alaska Farm Service Agency numbers to arrive at these acreage figures.]

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MR. WRIGLEY reported that Alaskan farmers have been working for years to try to develop a sufficiency in the farm market [slide 7]. He pointed out that two million acres per year in the U.S. are lost for agriculture to urban encroachment, and this loss can never be reclaimed. However, Alaska is in the position of being able to put vast resources back into production. Depending on which survey is considered, 8.9-18.5 million acres in Alaska have been determined suitable for some sort of agricultural production. The state's original agriculture plan called for 500,000 acres to be in production by 1990. Failure to reach that goal was because markets did not develop as

quickly as production did. Barley yields about 1 ton or 40 bushels per acre, he continued. Therefore 25,000 acres would produce about 1 million bushels which would heat about 5,000 homes.

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MR. WRIGLEY related that canola production has a tremendous following and last year a farmer in Delta Junction used canola oil as a biofuel to operate his farm equipment [slide 8]. The potential for thousands of acres exists if a processing facility can be built. A small canola processing plant is being planned for Delta Junction, he related. There is now a certain variety of canola that can be grown in Alaska that would meet the requirements for food grade canola oil that could then be used in-state.

1:17:07 PM

MR. WRIGLEY specified that farmers have spent years working to create a sustainable agriculture industry in Alaska [slide 9]. The original goals of the state's agriculture project are as valid and important today as they were 30 years ago, he maintained. "Alaska farmers are stepping up to the plate to help feed and fuel Alaska," he said. "The state can assist us to do this by including barley and other farm bioproducts in the state energy plan." He suggested making barley eligible under the Heating Assistance Program so program recipients could have the option of purchasing barley in those instances when it would be the most cost effective fuel. The state could also establish a program to assist villages in transitioning from inefficient, polluting furnaces to cleaner-burning barley furnaces. To reach Alaska's 2025 goal of 50 percent renewable fuels, he urged that research be funded to look at other biofuels that could be produced, such as straw, grass, and canola.

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MR. WRIGLEY addressed the frequently asked question of whether using feed for fuel is ethical [slide 10]. He pointed out that the in-state demand for livestock feed can be met by production on 3,000 acres per year; further, it is seldom economically viable to ship grain outside the state. Thus, any increase in production becomes surplus and too much surplus discourages future production. Additional markets are needed to promote more cultivation which in turn would stabilize supply for increased livestock production. "Asking if burning barley is

ethical is like asking if we should burn firewood when there is lumber," he said.

1:19:19 PM

MR. WRIGLEY spoke to another commonly asked question of whether there is enough barley to meet feeding needs and also burn. He said there is a current production and current demand, but the goal is to increase the demand for barley by expanding those markets and at the same time expand production to meet those expanding markets. The more appropriate question is whether there will be enough feed if additional markets are not developed, he continued. A certain level of production in excess of demand is required to assure any potential livestock operators that their feed needs would be met once they invest. "The more markets that can be developed for a commodity, the more security there is for producers to ... increase production of that commodity," he said.

1:20:07 PM

MR. WRIGLEY played a video of the 120,000 acre Delta Junction Agricultural Project. He narrated the film as it played. Most of the farms average 2,700 acres, he said. Barley production begins in the spring with fertilization and preparation of the land. The grain is seeded by either the no-till method or a grain drill. The barley grows, ripens, and is ready to combine by mid-August. The combine separates the straw from the grain kernels, and then the grain is augured into trucks and taken to storage. Whether for feed or fuel, the grain is used as-is without any sort of processing, he pointed out, and the straw by-product could itself be potentially used as a biomass fuel. The video included footage of Mr. Wrigley's own barley burning stove in Delta Junction. He said he burns 40-45 pounds of barley a day. The key to burning barley efficiently is getting enough air into the firebox, so there is an auger that stirs the burning grain. Analysis of the barley ash shows it has the same basic components as the fertilizer that is used to raise the barley itself. There are no chemical components so the ash is safe to use on gardens and lawns.

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MR. WRIGLEY, in response to several questions from Representative Wilson, explained that a pellet stove is used to burn barley. Some pellet stoves are designed to also burn grain such as corn, and most pellet stoves that burn corn will burn

barley. He clarified that barley ash contains the same components as the fertilizer used to grow the barley, but that those components are not in the same ratio as the fertilizer. He specified that most of the land he talked about [in slide 6] has already been cleared, although some of it has re-grown timber and would need to be re-cleared. According to the Alaska Farm Service Agency (FSA), he related, there are 72,000 acres that are considered cropland. Of that, 25,000 acres are in conservation reserve. Trees have been prevented from growing on some of that land in order to hold the producing potential; the land is therefore available and could be producing within three years if the market justified the extra production.

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MR. WRIGLEY, in further response to Representative Wilson, said barley produces a higher volume of ash than pellets, but he does not know how barley compares to firewood.

CO-CHAIR NEUMAN interjected that he purchased a pellet stove with his energy rebate and a ton of pellets produces one milk can of ashes. He said a ton of pellets takes up an area of about 4 feet X 4 feet X 4 feet, so a pellet stove is very efficient.

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MR. WRIGLEY, in response to Representative Tuck, stated that Alaska farmers have not supplied barley to local breweries. Breweries require a malting barley which is a two-row barley and the barley grown in Alaska is a six-row barley, he explained. However, a request for [malting] barley was recently received from an Interior brewery and the Farm Bureau will be checking with the university to see if there is a variety suitable for brewing that could be grown in Alaska. One of the benefits of raising barley in Alaska is that it is high in protein, he continued, but this is not a good thing for malting barley. The extra protein is from the long hours of sunlight, so a short-season variety needs to be found that would remain low in protein.

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MR. WRIGLEY, in further response to Representative Tuck, said he does not know how many jobs result state-wide from growing barley. In further response, he guessed that barley farming in the Delta region provides 100-200 seasonal jobs that are

suitable for students and younger family members. However, expansion of the market would create jobs beyond the market for farm labor. For example, there are less than 2 million farmers in the Lower 48, yet the number of jobs related to agriculture is about 20 million because of the transportation, processing, packaging, shipping, and secondary product, and these types of jobs would come along with this barley expansion.

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MR. WRIGLEY pointed out that using barley for fuel is just part of the equation. "What we are doing here is creating an additional market that will justify the expansion of an industry that will then justify development of a larger livestock industry," he said. Alaska suffers right now from being on the very tail end of a long transportation chain, so food security in Alaska is abysmal. Why not use some of the resources that the state already has? The state has already invested in this land to clear it and put in infrastructure. This would begin to strengthen Alaska's food and energy security. A large portion of the 8.9-18.5 million acres identified as suitable for agriculture lies along river valleys where the villages are. Villagers are looking at coming to the city because they cannot get food out there, he continued. The laws are already in place for developing agriculture and agriculture would give rural kids a job, something to do, and the ability to stay in their communities.

1:32:29 PM

MR. WRIGLEY urged lawmakers and agencies to pull together. It is time to stop shipping out raw materials as if Alaska was a colony and instead start processing and using those materials in the state, he opined. Fertilizer prices for urea doubled last year when Agrium closed, yet plans are underway to build a pipeline that will ship the gas out of the state without using any of it. The state can create industry and jobs; this is just the beginning of something. Land along river banks is some of the most fertile ground in the state and Native corporations and others could get together to raise their own vegetables, fuel, and animals.

REPRESENTATIVE TUCK offered his support for an agriculture project and said he does not want to rely on other countries for a food source.

CO-CHAIR NEUMAN added that the agriculture industry's economic multiplier of seven is one of the largest for industries in the nation.

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MR. WRIGLEY, in response to Representative Seaton, said there are no diseases or pests in the state with respect to barley. Most products raised in Alaska are relatively disease and pest free as compared to the Lower 48. However, Delta Junction, like the rest of the state, has some invasive weeds and there is a potential for those seeds to get into the barley in the course of combining, storing, and transporting. But, he pointed out, the state is not currently authorized to conduct weed control on public lands such as road right-of-ways.

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MR. WRIGLEY, in response to Representative Seaton, explained that barley varieties are brought into Alaska from outside primarily because there are no plant breeders in either the university or Agriculture Research Service (ARS) systems. Therefore, there is no capacity to develop new varieties. There used to be research in the state, and varieties were developed in Alaska for Alaska, but the federal funding was cut about 15 years ago, he said. Although the ARS is back in Alaska now, there is still no seed breeder. Seed is generally brought in from Canada, Finland, and other similar latitudes. In further response, he agreed that some of the barley grown in Alaska would be used as seed for the next crop. Ideally, he added, Alaska would have enough production to justify a seed breeder to develop seeds specific to Alaska's needs.

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MR. WRIGLEY, in response to Representative Seaton, stated that the current barley price of $235 a ton includes the price of fertilizer last year. There will be some minor adjustments this year as far as fertilizer price, he said, but he does not think this will result in an increase in the cost of product. Urea is the largest single component of fertilizer and can be produced from natural gas. The fertilizer blend typically used in the Delta Junction is 65-40-20-10, which is nitrogen/urea, phosphate, potash, and sulfur, respectively. While urea is the largest component of the fertilizer blend and a critical factor, some of the other components are more expensive than the urea.

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CO-CHAIR NEUMAN, in response to Representative Seaton, reported that industry is selling pellet stoves as fast as they can be made, even with two shifts per day. In addition, a gentleman in Tok is building pellet stoves and cannot keep up with the demand either. Transporting barley is easy because it is not hazardous like fuel. He related that last year it cost him over $5400 to heat his 2,400 square foot home with fuel, but this year with his new pellet stove he is expecting the cost to be $1200-$1500. He said he thinks the availability of this type of heating will be increasing because a lot of industries are expanding to wood pellets, barley, corncobs, and sunflower seeds.

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CO-CHAIR NEUMAN, in response to Representative Wilson, said his total cost of installation for the stove, stove pipe, and 4,000 pounds of pellets was $2,300.

REPRESENTATIVE WILSON remarked that the state would be better off to buy each family a pellet stove than to do all of the other things it is doing.

CO-CHAIR NEUMAN agreed that this is a question that needs to be looked at. It would reduce the cost of energy, expand agriculture, and create jobs, he added. Moreover, there would be the spin-off industries, the economies of scale, and the plus of being an Alaska product and a way to support Alaska farmers.

REPRESENTATIVE EDGMON interjected that making low cost capital loan programs available for purposes like this was a big part of his discussion today with the Alaska Housing Finance Corporation (AHFC). He pointed out that the Division of Investments is currently providing engine efficiency loans for 2 percent over 15 years. Many of these energy solutions will not come down from government, they will come bottom up from individual consumers, he opined.

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MR. WRIGLEY, in response to Co-Chair Neuman, said he understands why feed should not be used for fuel when there is a shortage of the product. However, it is not cost effective to ship out surplus barley, so any surplus stays in the state. If there is a surplus, why not use it for both livestock feed and fuel?

Both can be done in Alaska because barley is so easy to produce and it is so easy to expand production.

MR. WRIGLEY, in response to Representative Tuck, clarified that the prices shown on slide 2 are based on what he paid this winter in Delta Junction. In further response, he said the $5.52 price for barley is at the farm and is for a 50 pound bag which is the most expensive packaging for barley. In some places barley is a viable alternative and in other places it may not be, he continued. For example, fuel will likely be cheaper for people living near a refinery. But for people living near a refinery or who live in the Bush and have to ship in their fuel, barley may be more cost effective.

CO-CHAIR NEUMAN added that due to economy of scale, he thinks it would be likely that semi-truck loads would be used to ship the barley to communities.

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MR. WRIGLEY, in response to Representative Tuck, stated that crop rotation is definitely a plus when growing barley. Finding a rotational crop is a problem in Alaska and one of the advantages of canola is that it could be used as a rotational crop, he explained. Another alternative is one-year rest periods to give soil micro-organisms a chance to break things down and rejuvenate the ground. Farmers in Delta Junction are currently rotating one year of rest with a couple of years of production because raising barley crops without a rest would result in declining yields.

CO-CHAIR NEUMAN added that the no-plow planting method used in Delta Junction, and shown in the video, protects the land from soil loss when high winds blow in that area.

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MR. WRIGLEY, in response to Representative Tuck, said he did not take crop rotation into consideration [when he developed the acreage figures for production capability shown on slide 6]. He said he was just pointing out that these increases could be made based on the acreage that is available at this time. There are 120,000 acres in Delta Junction alone and 155,000 in the Nenana area, he continued. Nenana's growing season is 10 days longer than Delta Junction's and allows crop varieties that cannot be grown in Delta Junction. Alaska truly has a great opportunity in having the ability to put so much acreage into production, he

opined. Two million acres a year are being drawn out of production in the Lower 48 to build cities. Returning the land to farming cannot be done by removing the city because to build a city the top soil is taken off down to the gravel.

1:53:14 PM

REPRESENTATIVE GUTTENBERG said a railroad is another advantage that Nenana has besides its longer growing season. He noted that the first crop before barley is planted is black spruce or willow because they are fuel sources as well. He related that several years ago a university researcher told him the supply chain is broken for getting the crops to market regardless of whether it is an in-state or out-of-state market.

1:55:23 PM

MR. WRIGLEY acknowledged that the infrastructure could be improved. The proposed rail spur that would go to Delta Junction would certainly help, he said. Fertilizer is currently brought by rail to Moose Creek [near Eielson Air Force Base], then it takes two weeks of constant trucking to bring the fertilizer to Delta Junction. The issue is the same for hauling the grain or other commodity back, he continued. The grain must be trucked the entire way to Anchorage, Kenai, Homer, or other destination because there is no loading facility at the railroad. He agreed that the railroad in Nenana is an ideal situation.

CO-CHAIR NEUMAN offered his opinion that more wildlife species use the barley fields and edges of the fields than use the black spruce forests.

1:58:37 PM

FRANCI HAVEMEISTER, Director, Division of Agriculture, Department of Natural Resources, said she agrees with Mr. Wrigley. The division has a good working relationship with the Alaska Farm Bureau and the bureau was involved in coming up with the division's long-term plan. In regard to the lack of infrastructure, she said it is amazing that the state could have a barley project but no way to transport it. As far as biofuels, she said anything that would cut her heating bill by one-fourth to one-half is something worth looking into. Today's discussions are appreciated, she continued, as would be any input from the legislature in regard to promoting agriculture.

It is important to recognize the willingness of farmers to do things that the majority of people are unwilling to do.

MS. HAVEMEISTER, in response to Representative Guttenberg, said that [moving the barley-for-fuel project along] is addressed in the division's plan, although there is no fiscal note attached. She said she has been in her position only 17 months and it is her understanding that this is the first time the division has had industry buy into a plan that everyone can agree on. The division realizes there is a need, but has not done anything to address it, she allowed. In further response, she agreed to provide copies of the plan to the committee.

2:01:01 PM

REPRESENTATIVE SEATON commented that it seems an agricultural supply is being pushed for which there is not yet any users. The legislature could assist in promoting utilization of the product through energy rebates on stoves, getting supplies of stoves and fuel into an area, or setting up a demonstration project in a village, and then the agricultural industry can step up to supply the product. It may not be fair to put the push for utilization on the Division of Agriculture, he said, the legislature must do this and then the division can work on the supply.

CO-CHAIR NEUMAN remarked that people could afford barley for fuel because it costs a lot less [than oil or gas].

REPRESENTATIVE EDGMON agreed.

2:04:36 PM

MR. WRIGLEY, in response to Representative Wilson, explained that some of the farms do not have power or houses on them because when the farms were laid out in the barley project, home sites were laid out in the surrounding area. So, while many farmers do not live on the farm, they do live in the vicinity. Most farming activities do not require anything but the farming equipment, but generators are used for those times when electricity is needed. The farmers' co-op in Delta Junction was established to store fertilizer and grain and to dry grain, and many of the larger farms have storage and drying facilities or buildings. The farms are still owned, they just are not in production, and these are the acreages that would take 2-3 years to bring back into production.

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MR. WRIGLEY, in response to Representative Seaton, said the particulate matter from barley is so much smaller than wood that he does not think the barley particulates would show up as even a blip in the air quality in areas like Fairbanks that have inversions. He said when his barley stove is running he cannot see any smoke coming out. What happened in Fairbanks, he explained, was that there were more people wanting to convert to pellet stoves than there were stoves, so these people turned to outdoor wood burning boilers which are very inefficient and create a lot of particulates. People were forced to take what was available and barley stoves were not an option available at that time. In further response, Mr. Wrigley said barley stoves are available now from the Harman Stove Company.

HB 12-ALASKA COUNCIL ON INVASIVE SPECIES

2:10:33 PM

CO-CHAIR NEUMAN announced that the next order of business would be HOUSE BILL NO. 12, "An Act establishing the Alaska Council on Invasive Species in the Department of Fish and Game."

2:10:51 PM

JEANNE OSTNES, Staff, Representative Craig Johnson, Alaska State Legislature, spoke on behalf of Representative Johnson, co-prime sponsor of HB 12. She related the 2007 story of invasive species arriving in Alaska in a plane full of Christmas trees. The plane's original destination was Hawaii, but when several species of non-native wasps and soil microbes were discovered in the cargo, Hawaii refused to let the plane be unloaded. The flight was then diverted to Anchorage where the trees were unloaded, warehoused, and then sold for $40 each. Within one week the Cooperative Extension Service was receiving calls from people reporting that wasps were in their homes.

MS. OSTNES said this incident brought to light that Alaska does not have a policy. Subsequently, over 30 state and federal agencies, and private and non-government organizations, signed a memorandum of understanding (MOU) to establish the Alaska Invasive Species Working Group (AISWG). This group has been working for two years, but it cannot make policy, she pointed out. Under HB 12, the Alaska Council on Invasive Species would be established to provide a policy forum to keep Alaska from becoming like the rest of the U.S. Council membership would

consist of five state commissioners [along with nine other representatives listed in Section 03.22.110].

2:15:09 PM

MS. OSTNES, on behalf of Michele Hebert, gave a PowerPoint presentation prepared by the Alaska Invasive Species Working Group. She first pointed out that slide 2 lists the MOU signatories, then she read slides 3 and 4 of the presentation:

> On a national level, invasive species are estimated to cause over 1 billion dollars a year in environmental and economic damages.
>
> Almost half of the states in the US have some sort of group addressing all-taxa of invasive species. These groups vary in their composition, level of state support, structure, and activity level. State based organizations can react more efficiently and effectively to areas of local concern.
>
> UAF-CES was initially funded by the EPA (Environmental Protection Agency) to coordinate the development of an invasive species council. In 2007 it has also received funds form ADF&G, NMFS/NOAA, and USFWS/PWSRCAC.

2:16:39 PM

> Alaska experiences fewer invaders than many of the other states. The goal of the AISWG is to help preserve Alaska's natural environment and economic resources.
>
> Alaska is lucky to be at the beginning of what could become very expensive and deleterious effects from invasive species. Groups have already formed to address plant invaders, marine invasives, and other concerns.
>
> The Alaska Invasive Species Working Group aims to coordinate existing efforts, and to protect Alaska from invasives species of all taxonomic groups.

MS. OSTNES pointed out that "all taxonomic groups" includes more than just plants - it includes invertebrates, birds, insects, microbes, and so forth.

2:17:38 PM

MS. OSTNES read slide 5 of the presentation:

> The goal of the Alaska Invasive Species Working Group is to help preserve Alaska's natural environment and economic resources.
>
> AISWG's aim is to coordinate existing efforts, and to protect Alaska from all taxonomic groups.
>
> Increasing effort through coordination!

MS. OSTNES noted that committee packets include a two-page briefing paper and the MOU, both of which were written for legislators as well as the general public. Also included in the committee packets are outlines of AISWG's goals and objectives. She explained that AISWG's monthly teleconference meetings address a variety of different subjects. Marine, green crab, and tunicate monitoring groups are in full swing, she reported. There is a listserv [aisc-l@lists.uaf.edu] that provides information to people as it happens and AISWG's website, www.alaskainvasives.org, provides information and links.

2:19:30 PM

MS. OSTNES read slide 7 of the presentation:

> AISWG Marine Subcommittee. Monitoring coordination teleconferences have been held for Green Crab and Tunicates. Sampling efforts are on track for this summer in several locations (Valdez, Homer, Sitka, Juneau, Ketchikan, Gustavus, etc.).
>
> Smithsonian Environmental Research Center has been working with both groups, and AK DOT has been very helpful in working toward getting tunicate monitoring at selected ferry terminals. The green crab poster has been printed, laminated, and is on its way out to coastal communities.

MS. OSTNES listed the invasive marine species that are already in Alaska [slide 8]: Atlantic salmon, boring sponge, dead man's fingers, golden star, rockweed, and violet tunicate. Marine species that are not yet found in Alaska, but could be close,

are: Atlantic cord grass, colonial tunicate, green crab, and New Zealand mud snail.

MS. OSTNES noted that Arctic and red foxes are invasive mammals that were introduced to 400 islands by fur merchants during the Russian and territorial days [slide 9]. The U.S. Fish and Wildlife Service began eradication on uninhabited islands in 1949 and now over 40 islands are fox free. Removal of fox allowed the Aleutian Cackling Goose to increase numbers on fox-free islands and be removed from the endangered species list. Norway rats, an invasive mammal that preys on bird eggs, were first introduced by ship wrecks and ports in 1780.

2:20:47 PM

MS. OSTNES said handouts have been prepared and distributed to communities that show the difference between Alaska's crabs and the European green crab, an invader that has now reached as far as Vancouver Island [slide 10]. The green crab is transported via ballast water and hull fouling. It is a voracious hunter that could compete with Dungeness crab and other native species. She related that the Alaska Department of Fish & Game estimates that up to 3,000 Atlantic salmon are present in Alaska waters each year. This salmon species is farmed in British Columbia and escapees have spawned in at least one British Columbia river. Ms. Ostnes understood that the Atlantic salmon escapees have sea lice, a problem that could affect Alaska's native salmon.

MS. OSTNES spoke about the birch leaf miner and the defoliation of trees by insects [slide 11]. She said the animal pathogen that causes chronic wasting disease has not yet been reported in Alaska but may be here soon [slide 12]. The plant pathogen that causes late blight disease has been reported in the Matanuska Valley.

2:22:38 PM

MS. OSTNES read the opportunities listed on slide 13 for an Alaska Invasive Species Council:

> Coordinating the state resources to maximize opportunities to prevent and control invasives.
>
> Organize and streamline the interagency process for exclusion, early detection and control.

To provide policy level direction and planning for managing invasive species and preventing the introduction of others.

Foster coordination, streamline approaches that support initiative for management.

Avoiding program duplication by building a strong collaborative approach.

Form an advisory and subcommittee with top level support.

MS. OSTNES concluded the presentation by reading slide 14:

With the passage of HB 12 we will be able to continue the work of the AISWG and strengthen efforts already underway.

2:23:17 PM

MICHELE HEBERT, Land Resources Agent, University of Alaska Fairbanks Cooperative Extension Service; Member, Alaska Invasive Species Working Group, testified on behalf of the Alaska Invasive Species Working Group. Seventeen states are using invasive species councils, she reported. Resources are pooled when decision makers come together in these councils, so a lot more gets accomplished at less cost. That is the beauty of HB 12, she continued. This legislation would get Alaska's commissioners sitting together in a forum where suggestions can be made to them on policy changes and decisions can be made on how to share resources to make better use of money and make things happen more quickly in the state.

MS. HEBERT said the working group has worked hard and accomplished a lot over the past three years. However, the working group has put establishment of this council as a top priority because the group is limited in what it can do without policy decisions. The councils in other states have allowed for quicker responses in preventing and managing invasive species.

2:25:17 PM

REPRESENTATIVE WILSON asked what AISWG's intentions are in regard to non-native timothy and alfalfa planted by farmers for farm animals.

MS. HEBERT replied that the real beauty is the work already done by the Alaska Invasive Species Working Group and the Committee for Noxious and Invasive Plants Management (CNIPM). From the beginning, everyone, including farmers, has been brought to the table so that everyone's concerns are heard. The group has met for the past seven or eight years to develop strategic planning for invasive plants. In addition, annual meetings have been held for six years. Therefore, concerns about certain crops or certain plants are heard. Farmers are at the table and being heard, and no one is threatening to take any crops away such as timothy, rye grass, or brome. The target is not exotic plants, the target is invasive species, such as purple loosestrife, that threaten to harm Alaska's wild lands, wetlands, and wildlife.

MS. OSTNES interjected that Alaska is a right-to-farm state.

MS. HEBERT further explained that Alaska's invasive species movement was started by farmers coming to her office to tell her that weeds from federal lands were blowing onto their farms and they were having to use extra herbicides to get the weeds out. The farmers wanted to know what she was going to do to help them tell the federal agencies to control those weeds. Ms. Hebert noted that although she is testifying as a representative of the Alaska Invasive Species Working Group, she has been the agriculture and horticulture agent for the Alaska Fairbanks Cooperative Extension Service for 18 years. Thus, her main concern is with agriculture.

2:28:39 PM

REPRESENTATIVE WILSON inquired whether the state has anyone at its ports to check for invasive species.

MS. HEBERT responded, "We are not adequately staffed; but it also may be that we don't have the regulations to keep that particular insect out of the state of Alaska."

2:29:13 PM

REPRESENTATIVE WILSON said she is appalled and thinks this should be an automatic part of government. She asked whether there is any way to take care of this by using private industry.

MS. HEBERT said her suggestion is to bring all the players together because the accomplishments to date are from everyone coming together. This is the only way the state will be able to keep invasives out, she continued. There are so many different

land managers and unless they come together to talk about the issues they cannot help each other out. If the people from agriculture talked to people from the U.S. Coast Guard the state would be more likely to catch these things; otherwise the Coast Guard may not know what it is looking at. Sitting down together and addressing the issues in a common voice would provide early detection, rapid response, and preventative measures.

CO-CHAIR NEUMAN noted that the State of Alaska does have a plant materials center that looks at the different seeds coming into the state, as well as an inspector that checks logs to ensure they are clean for export. So, the state has the people there, the agencies just need to be funded adequately.

2:31:40 PM

REPRESENTATIVE KAWASAKI asked whether creating another council would dilute the message since there are already groups dealing with this.

MS. HEBERT explained that the working group has been held back by policy and has been unable to impact having policy changed. This is the key, she said. Both CNIPM and AISWG are recommending that decision makers come together once a year with the ability to make recommendations to the legislature. The working group, CNIPM, and others will be the technical part of this process. Establishing this council will not take away what these groups are already doing, it will just put in place the step that is missing in the process.

CO-CHAIR NEUMAN added that this will be discussed during the committee process.

MS. HEBERT, in further response to Representative Kawasaki, said the proposed council would be for making policy change recommendations and the sharing of resources. The bill also has additional provisions for subcommittees and technical groups as needed to accomplish what needs to be accomplished.

2:34:59 PM

REPRESENTATIVE TUCK noted that the Municipality of Anchorage is very strict in its rat prevention policy. He said he thinks Anchorage is the only port in the U.S. that is rat free. He inquired as to whether the council would coordinate with or take over other programs, or would the council establish policies that local government and communities would then implement.

MS. HEBERT answered that the council would not be controlling any government entity or city. It would utilize AISWG and CNIPM for guidance. For example, the working group has been addressing rat control and as a result there have been multi-agency projects to control rats in the Aleutian Islands. Because everyone is coming together in meetings, identifying which agencies need to get involved and how resources can be shared, a much better job has been done in controlling rats. On the same hand, this group is not telling each agency what to do, it is just sharing ideas. The frustration is that the people in the group are regular people, not decision makers, so the council is being seen as an opportunity to share resources with the decision makers.

2:37:48 PM

REPRESENTATIVE GUTTENBERG asked whether HB 12 creates any enforcement authority to actually do anything such as inspecting imported agricultural products or trees.

MS. HEBERT replied, "I think the council is the powers to be, but the work horses who identify and send things up to the council would be the working group." For example, the birch leaf miner is a new invasive from Europe. It arrived in landscape materials delivered to the Fairbanks military base and now it is a problem in the Interior. She continued, "We have a lot of people who are work horses, like myself, who know there is a problem, but we are not decision makers, we are not higher level people, and our hands are totally tied." The working group would bring these issues to the council so the five commissioners - the decision makers - could act on it. "Unless we have the different departments talking to each other, we can't really work together," she said.

2:40:50 PM

LORI ZAUMSEIL, Co-founder, Citizens Against Noxious Weeds Invading the North (CANWIN); Coordinator, Anchorage Cooperative Weed Management Area, testified on behalf of CANWIN. In regard to whether the council that would be established by HB 12 is really needed, she offered her view that the council would be a state supported, sanctioned, and recognized entity, whereas the other groups are citizens with no state recognition. Alaska really needs a formal program, she stressed. For example, when AISWG was formalized by House Bill 330, a huge window was opened to receive federal funding. In regard to non-natives like

timothy and alfalfa, Ms. Zaumseil clarified that neither the invasive weeds group nor the invasive species group is talking about targeting non-natives; they are talking about invasive, noxious species - one is not necessarily the other. Being non-native does not make something invasive.

MS. ZAUMSEIL paraphrased from her prepared statement [original punctuation provided]:

> Last year, the first vital steps were taken to protect Alaska's economy, ecology and environment from the devastation of noxious weeds. Troy and I had no experience with the political process, but were very gratified by the unanimous response to [House Bill] 330. When Representative Johnson proposed that legislation, we vowed to dedicate our time and effort to making people understand the importance of developing this statewide response and why it was the fiscally responsible thing for their senators and representatives to do. We have spoken to many local, state and national audiences about Alaska's fight with invasives and met experts fighting the same problems in other states that threaten Alaska. Without exception, we hear the same message--that Alaska is America's last chance to do it right and not suffer the tens of millions of dollars in expense and losses due to invasive species, but that is only possible if we act quickly and aggressively while the advantage is still ours to take. HB12 is the next important step in the process. This legislation needs your vote today and as it moves forward, but in addition, Alaska and her citizens need your continued support as the agencies and people on the ground work to prevent and control invasive species from impacting our Great Land.

2:45:12 PM

REPRESENTATIVE GUTTENBERG said his concern is whether this council will have enough muscle when a problem is identified to do what needs to be done.

MS. ZAUMSEIL responded that the council would bring together all of the agency people who have the ability to make the regulations - those regulations would provide the muscle. Plus, all of these decision makers sitting at the table with all of the interest groups is muscle in itself, she added. The council

would make recommendations and give power to agencies like the Division of Agriculture and the Alaska Department of Fish & Game to explain why a certain regulation is needed so that when it goes out for public comment the public will understand and support the regulation.

2:47:05 PM

REPRESENTATIVE GUTTENBERG presented an example of northern pike being collected in one place in Alaska and released in another location where it is an invasive. Will Alaska State Troopers or other agency have the authority to stop that action, he asked.

MS. ZAUMSEIL said she is not really the person to answer this question. However, she understood that the Alaska Department of Fish & Game recently passed a regulation that makes this a fineable action.

SENATOR OLSON offered his belief that this was addressed several years ago in legislation that gave the Alaska Department of Fish & Game enforcement power in matters like this.

CO-CHAIR JOHNSON explained that the commissioners will write the regulations. He pointed out that when a regulation is needed that requires legislation, Alaska's commissioners have a history of not being bashful about coming to the legislature to ask for the needed legislation. It is much better to have things bubble up from the community than to have things bubble down from the legislature and this is what HB 12 addresses, he said.

2:49:22 PM

REPRESENTATIVE EDGMON, in regard to council membership [page 2, line 9, Section 03.22.110], asked whether there is a need to have federal land and water managers on the council, such as the U.S. Coast Guard, U.S. Fish and Wildlife Service, and National Park Service. In addition, he suggested that it be researched as to whether a tribal council should be included on page 6, line 8.

CO-CHAIR NEUMAN urged Representative Edgmon to work with the sponsor in regard to his suggestions.

REPRESENTATIVE EDGMON said he wanted to make these comments while everyone is on line.

2:50:51 PM

DAN GILSON, Project Manager, Oil Spill Prevention & Response Operations, Prince William Sound Regional Citizens Advisory Council, spoke from the following written statement [original punctuation provided]:

> The [Prince William Sound Regional Citizens Advisory] Council is a non-profit whose mission is promoting the environmentally safe operation of the Alyeska terminal and associated tankers. The Council's 18 member organizations are communities in the Exxon Valdez oil spill impact region, as well as business, recreation, tourism, commercial fishing, Native and aquaculture groups.
>
> Because of our concerns regarding invasive species arriving in the ballast water attached to the hulls of tankers, we are here today to support HB 12, the bill to create an invasive species council.
>
> This legislation is vital in helping to help protect Alaska environments and economies from the threat of invasion by harmful non-indigenous organisms. We must act now in order to avoid a potential catastrophe.
>
> The purpose of the council would be to provide a coordinated, multi-stakeholder approach for addressing the potential risks of harmful invasive organisms and agents throughout the state and to work toward preventing the future introduction of other new invasive organisms and agents to the state.
>
> The minor amount of money spent annually on a council could save us billions of dollars in lost economies, environments and industries in addition to costs associated with controlling invasions. Just look at the situation with the zebra mussels in the Great Lakes. The government estimates that economic losses and control efforts cost the United States about $5 billion each year.
>
> A more immediate threat to Alaska Coastlines is the European Green Crab. Green crabs eat clams, oysters, mussels, marine worms and small crustaceans that are important foods for native species. This invasive crab has marched its way up the west coast of the United States and has invaded Vancouver Island most

recently. It is not a matter of “if” we get green crabs, but “where and when.” To give you an idea of the economic devastation posed by the green crab, which is also invasive to the East Coast of the United States, the estimated total losses due to the green crab on the East Coast during 1975–2005 range from $719 to $806 million. Although economic impacts to the West Coast are negligible under current conditions, the West Coast impacts could increase to almost a million dollars per year if the green crab were to spread up to Alaska. And we do expect this spread to makes it way to Alaska. We know the crabs can survive and establish themselves in our waters.

There are numerous threats to Alaska in terms of invasive species and just as many horror stories of these species taking over environments in other states. Another real threat to Alaska is Purple [Loosestrife] which has been found in the Westchester Lagoon area in Anchorage. This plant can produce up to 2.7 million seeds per plant yearly and spreads across approximately 1 million additional acres of wetlands each year, with an economic impact of millions of dollars. A coordinated local effort in Anchorage has been on top of that infestation, but one can easily see how a broader coordinated effort is needed to proactively deal with these issues.

At this moment in time, Alaska is relatively free from invasive species. Contrary to a popular myth, Alaska is not isolated as it receives significant amounts of air, water, and land traffic. Also, climate change is making conditions in Alaska more favorable for harmful invasive species.

Unless Alaska takes a proactive stance, Alaska will suffer the same fate as other states dealing with the management of harmful invasive species. Formation of a council to develop a strategic plan, coordinate efforts, and share information is essential to be able to take advantage of funding opportunities only available to such coordinated entities. The minor amount of money spent on a council annual will pay dividends in the significant amount of money not spent on managing weeds, pests and other critters.

I urge you to support this bill.

2:54:51 PM

CO-CHAIR NEUMAN interjected that Tom Lawson, Director, Division of Administrative Services, Alaska Department of Fish & Game, is available to speak to the fiscal note.

2:55:11 PM

SUE ELY, Legislative and Communications Manager, Alaska Conservation Alliance, said her group is a coalition of 40 Alaska conservation organizations. She testified from the following written statement [original punctuation provided]:

> I would like to thank you for the opportunity to speak in support of HB12, establishing the Alaska Council on Invasive Species in the Department of Fish and Game.
>
> Alaska is home to an amazing abundance of plant and animal life. Whether valued as charismatic Alaskan icons, or as the source of our continued economic and subsistence prosperity, Alaska's flora and fauna are vital to our economic well being [and Alaska's] way of life. However, these resources could be threatened by the spread of invasive species.
>
> Already Alaska has suffered the effects of invasive Atlantic Salmon, pike and Reed Canary grass, to name a few. Plants, animals, fish and crustaceans, introduced into an environment devoid of their natural predators and limitations can irreversibly destroy an ecosystem and that destruction can translate into direct monetary, cultural and lifestyle impacts. Invasive species have cost lower 48 economies billions of dollars in revenue. In order for Alaska to avoid a similar fate, it is prudent to address this issue now.
>
> I believe the 14-member Council will provide the broad stakeholder cooperation and oversight needed to prevent new invasive species from taking root in Alaska and to mitigate the damage of invasives already introduced. At risk are Alaska's biological treasures; its harvest resources and subsistence plants and animals; the beauty and diversity that make Alaska a world-class tourist destination. It is our understanding and our hope that the least amount of the least toxic management tools would be used to

control marine invasive species and that pesticides be used only as a last resort.

The Alaska Conservation Alliance would like to thank you for this opportunity to voice our support for HB 12 and encourage you to pass this bill out of the [House Resources Standing Committee].

2:57:46 PM

CO-CHAIR NEUMAN introduced several state and federal agency personnel in attendance, including Gino Graziano, Natural Resources Specialist II, Department of Natural Resources, who was hired last year as a result of House Bill 330 that created a state coordinator position for noxious weed, invasive plant, and agricultural pest management and education.

REPRESENTATIVE SEATON pointed out that the House Resources Standing Committee passed [House Bill 330] last year, which demonstrates that the committee shares the public's concern about invasive species. He therefore requested that people help the committee by keeping their comments to the context of HB 12 and the process of using the proposed council as written in the bill.

3:00:21 PM

CO-CHAIR NEUMAN held HB 12. He urged people to talk to the director of the Division of Agriculture and the director of invasive species to learn what has already been done and how HB 12 would compliment the actions taken to date.

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 3:00 p.m.