

ISAC Meeting Minutes

February 26-28, 2019

Smithsonian Institution

National Museum of the American Indian

Tuesday, February 26, 2019 – Stakeholder Dialogue

Members Present

- Chuck Barger (Chair), University of Georgia
- Edward Clark, The Wildlife Center of Virginia
- Slade Franklin, Wyoming Dept. of Agriculture
- William Hyatt, Connecticut Dept. of Energy and Environmental Protection (ret.)
- Janis McFarland, Syngenta Crop Protection, LLC.
- Blaine Parker (Vice-Chair), Columbia River Inter-Tribal Fish Commission
- Sean Southey, PCI Media Impact

Members Absent

- Laura Meyerson, University of Rhode Island
- Carol Okada, Hawaii Dept. of Agriculture
- Brent Stewart, Hubbs-Sea World Institute
- Gary Tabor, The Center for Large Landscape Conservation
- Jeffrey White, Newmont Mining Corporation / Elko Land and Livestock Company

NISC Secretariat Staff Present

- Kelsey Brantley, NISC/ISAC Operations Coordinator
- Stas Burgiel, Acting Executive Director
- Jeffrey Morisette, Senior Scientist
- Jason Kirkey, Publications Director
- Sarah Veatch, Interdepartmental Coordinator/Project Manager

Welcome Remarks

The meeting was called to order at 8:17 AM. **ISAC Chair Chuck Barger** gave welcoming remarks, thanking those in attendance for coming to this 20th anniversary ISAC meeting. He reviewed the roles and responsibilities of ISAC members, Federal employees, and stakeholders. ISAC members were reminded of their duty to provide consideration and advice to the Council, referencing Executive Order; 13751. An overview of the agenda was provided.

Acting NISC Executive Director Stas Burgiel provided additional background on the changes in ISAC membership. In 2017 there was a review of ISAC which resulted in a decrease in size from 32 to 16 members. The federal government shutdown status in December 2018 impacted the NISC Secretariat, resulting in a fairly compressed schedule to organize this meeting and causing scheduling challenges for all ISAC members to attend. Given the small size of the group, S. Burgiel suggested that the agenda be flexible with respect to addressing the topics: 1) 20 year retrospective of ISAC products and recommendations; and, 2) the tick/invasive species task team. He also explained that the informational Fire/Invasive session scheduled for noon on Wednesday was cancelled so that ISAC could instead use that time to digest and react to the information received up to that point in the meeting. All participants and attendees were reminded that the meeting was being recorded in its entirety.

There were no questions/comments for Dr. Burgiel. C. Bargeron then opened the floor to round-robin introductions from ISAC members and other participants and observers.

NOTE: ISAC members J. McFarland and Sean Southey were not yet present but expected to arrive soon. The meeting was allowed to begin, but decisions requiring a vote would be delayed until both members arrived, thereby constituting a quorum of seven members present.

Facilitated Stakeholder Dialogue with Non-Federal Partners

The session was facilitated by ISAC Member E. Clark, who thanked ISAC members and others in attendance for giving their time to support an issue of great importance to the ISAC. C. Bargeron advised the audience to send him via email any additional comments for ISAC consideration.

NOTE: To encourage more productive interaction from the small group of members and public observers, E. Clark (with the concurrence from the ISAC Chair) invited the each stakeholder to provide their comments at the table, and allowed open discussion with other stakeholders in the audience. Summarized below are interactions between stakeholders and a list of those who provided written comments.

In-Person Stakeholder Comments

Chris Stelzig, Entomological Society of America (ESA): The ESA has found working with NISC for the past 1.5 years to be impactful and helpful. ESA focuses on many issues and invasive species is a core priority. C. Stelzig reported on the invasive arthropod species summit on 9-10 November, 2018 in Vancouver, co-hosted by ESA, the Entomological Society of Canada (ESC), and the Entomological Society of British Columbia (ESBC). He pointed out five priorities identified by the international community through the summit:

1. International collaboration (inter- and intra- border)
2. Increasing capacity through a trained and credentialed workforce
3. Innovation
4. Broadening the base, building out programs, including citizen science
5. Creative funding

Blaine Parker commented on observing a family at the airport, which found a brown marmorated stinkbug in a kid's shoe in a backpack. C. Stelzig then briefly addressed inadvertent travelers, and that it is a lot cheaper to keep them out.

William Hyatt highlighted what ISAC wrote on federal/state partnerships and asked if the ESA report included some brainstorming ideas or solution on collaboration. C. Stelzig replied that the summit was the first step. He would be happy to provide the ISAC Chair with a copy of the report. The primary role for ESA is that of conveners. The next step is more public awareness.

Stas Burgiel inquired about the innovation component. C. Stelzig said that any innovation would be focused on partnership. They are exploring a partnership with experience.com on crowd-sourced funding to launch a challenge grant program. Also, the ESA Annals special issue being done in partnership with the NISC Secretariat, should provide some exciting science. The International Congress of Entomology will be in Finland in 2020. Invasive species will be a core topic at that meeting.

Slade Franklin: asked about "increased capacity" with respect to federal, state, others. C. Stelzig replied that the focus was on federal capacity, but noted that states are just as important. ESA looks to legislation that supports federal efforts. They also watch for grants opportunities. S. Franklin then asked if C. Stelzig could provide more background information on the creative funding topic. C. Stelzig replied that, as a core issue and challenge, their end goal is to have appropriators recognize the need to fully fund federal work and break into new innovative funding models. As an NGO, their ability to provide funding is limited but they can try to bring the conversation issues to the right groups.

Ed Clark noted that longhorned tick was observed 4+ years before its presumed "discovery" in 2018. E. Clark's group turned over their records to NC State. C. Stelzig noted how this brings up the importance of biological collections, but how funding for such collections is not good. Innovative tools and techniques are therefore necessary to identify invasive species and archive information are needed. Informal coordination is happening and critical.

Chuck Barger asked a question on systematics and data sharing, referencing the 2016 ISAC White Paper that highlighted this issue. He asked if such a product helped ESA. Chris affirmed that the white paper was very helpful. ESA develops fact sheets and other material to promote key issues. Background documents like the ISAC white paper and the NISC Management Plan provide good digestible information to help formulate such fact sheets.

Belle Bergner, North American Invasive Species Management Association (NAISMA):

Referencing the Play, Clean, Go campaign, Ms. Bergner posed the question: What does public awareness mean in real terms? It is about changing behavior more than passing on information. The messaging that states are telling people what to do, is not necessarily consistent across the board. In trying to put together a video on how to clean equipment NAISMA found that one state can show one thing while another state cannot, depending on state-level laws and regional culture. They also learned that co-branding and co-messaging can reach a larger audience and have more of an impact. It would be useful to consider where NISC/ISAC could help with such co-branding, and co-messaging. Continuing with the topic of streamlining cooperation, as discussed at the 2018 ISAC meeting and mentioned in some ISAC recommendations, there should be continued work to facilitate cooperation across boundaries.

Slade Franklin mentioned coordination on messaging and the “Play, Clean, Go” campaign. He mentioned how NISC came out with “we can do this” as one example of a lot of other messages out there. Perhaps the community has not done a good job at consistent and streamlined messaging. B. Bergner replied that the Play Clean Go campaign was designed to complement other messages and that they were trying to consider specific but multiple audiences. S. Franklin wondered if anyone has analyzed how much different players are spending on messaging.

William Hyatt agreed that it would be good to focus on changing behavior, mentioning the effectiveness of the Clean, Drain, Dry campaign. There needs to be balance between the audiences, the number of messages, and coordination. B. Bergner acknowledged the USDA Animal and Plant Health Inspection Service (APHIS) and Forest Service have been able to dedicate resources to their communication strategies. C. Stelzig (ESA) suggested that what is good about Play, Clean, Go is that it tells you what to do. Whereas “we can do this” does not. If we can coordinate on these messages, it would be helpful. E. Clark agreed that changing people’s behavior is the critical component. B. Parker referred back to 2014 and the 100th Meridian Initiative where each state had different laws on mussels. They convened a group of lawyers who spent 4+ years to review law and policy across 15+ states to work toward streamlining and conformity of rules and regulations across states. B. Hyatt mentioned that this issue was a case study in the ISAC federal/state coordination white paper.

Stas Burgiel pointed out that there was a clear advantage for states to coordinate on mussels.

Blaine Parker (to Belle Bergner) asked how NAISMA used ISAC white papers. B. Bergner replied that they do see them when they come out but could be using them more. Historically they have not had much of an impact. Blaine suggested that NAISMA could have a committee to develop white papers.

Ed Clark mentioned frustration with NISC not meeting in 11 years. C. Stelzig (ESA) suggested that this is the type of coordinating role that the NGOs can do as a convening function. C. Bargeron mentioned that each group does a good job within their “own box” but what he hasn’t seen is coordination among different organizations to have all of these groups working together; where there would be some power in numbers to have those groups focus on invasive species. Chris mentioned that ESA has been considering a federal stakeholder group.

Slade Franklin would like to see states take more of the lead, instead of federal agencies. He suggested that the invasive species community has not done a good job communicating with the federal agencies on what is needed. That could be more effective. E. Clark noted that the White House report on biodefense was similar to the ISAC white paper on wildlife health, but there was no clear reference to it in the White House report. S. Burgiel mentioned that the ISAC white papers have helped start some conversations among federal agencies, especially where it is valuable to get insight from outside the federal workforce. C. Bargeron noted that ISAC shifted from a 32 to 16 member group. There are pluses and minus to a large group vs. small group. An advantage of the larger group is that it brings together more people who would not otherwise work together. This helps to facilitate conversation across domains and disciplines.

With ISAC's permission and at S. Burgiel's request, Cindy Tam (USGS) mentioned that the White House biodefense document did borrow from and utilize the ISAC white paper by way of USGS participation in that effort.

Break: 10:00 AM – 10:15 AM

Facilitated Stakeholder Dialogue with Non-Federal Partners (*continued*)

Ed Clark reflected on the questions that had been raised so far and asked who needs to hear these things and who can do something to make these things happen.

Slade Franklin asked how ESA and NAISMA are sharing their respective messages. B. Bergner replied that NAISMA has looked for opportunities at the local or regional efforts. Perhaps a new coordinating body could propose, or take the same players and reorganize. C. Stelzig said the ESA considers three audiences: 1) federal policy makers, 2) related stakeholders (some in the room and some not), and 3) the general public.

Slade Franklin asked if ISAC is an important tool for their organization and what could make it more useful. C. Stelzig said that yes it is important to ESA because it helps inform what NISC is doing, that ISAC members are the ones making things happen at NISC. He noted the need for an entomologist on ISAC.

William Hyatt added that when ISAC was larger it had more depth. B. Hyatt also asked for clarification: Do you mean an entomologist or someone who represents entomologists? C. Stelzig replied that his hope would be the latter, but certainly an advocate who could speak on behalf of the science. B. Bergner also said that ISAC has played an important role, but that there are opportunities to further leverage the relationship. NAISMA would be willing to work with ISAC to explore ways to increase these connections and communications.

Ed Clark followed up by asking what ISAC could have done to be more useful. How could that bridge be more effective? B. Bergner suggested that providing more opportunities to provide feedback would help. C. Stelzig offered that ISAC could help with messaging to the extent that ISAC is able to communicate to wider audience.

Stas Burgiel informed the group that NISC reached out to ISAC for input on the contents of the NISC Management Plan. As NISC and the NISC Secretariat are considering the next plan, there could be hooks and key areas to engage ISAC.

Ed Clark reflected on how the forced diversity of interest and expertise on ISAC has been fruitful. ISAC can be considered a microcosm of the stakeholder community and can help facilitate two-way interaction with those communities.

William Hyatt asked if it is more important to provide input on federal communications or coordinate across a wider universe of players. B. Bergner suggested that there is a way to be less top down and to interact with more people in the field. C. Stelzig suggested talking with extension offices at land grant universities.

Chuck Barger suggested better use of other communities/groups, where it is up to ISAC to make sure the conversation makes it out to "our different stakeholders." ISAC members are typically

involved with or members of other groups; which they should engage to share messages and solicit feedback. E. Clark suggested that ISAC is not tasked to bring that message back to their constituents, but rather meant to bring their message to the federal agencies.

Earl Campbell (FWS) suggested that ISAC consider what is called for in the Executive Order, as it seems like some of the functions being discussed are outside that mandate. E. Clark noted that all ISAC members' terms expire in May 2019. The conversation now is based on what has been done in the past, but also what could happen going forward, including consideration of whether the Executive Order is too broad, not broad enough, or should be vacated. S. Burgiel mentioned that there are bylaws and a charter for ISAC that provide detail beyond the Executive Order and both will be reconsidered in September.

Chuck Bargeron then asked for input from the federal senior advisors on what has been discussed during the morning session.

Samantha Simon (USDA) echoed what E. Campbell said with respect to the role of ISAC. The role should be as clear as possible and ISAC will not be able to represent all stakeholders. It is also worth noting that each agency will have its own perspective. Work coming out of ISAC has not been that relevant to USDA as it is already doing a lot of work on the topics being addressed by ISAC. When talking about "who needs to do what," it is important to recognize that federal employees do not make laws and cannot request that laws to be made. NGOs have the opportunity to influence those areas. That said, federal agencies can make policy. This administration has focused on giving control and authority back to states, and there has been a lot of international work as well. There is a lot of work that often happens behind the scenes and is not obvious to the broader community or ISAC.

Hilary Smith (DOI) stated that there were no real surprises in what was expressed, but wanted to talk about coordination. She coordinates internally, and even within DOI there are challenges. Coordination with the wider invasive species community is important. So, how do we bridge across those agencies? NAISMA is doing some good work, and the Western Governors Association (WGA) is convening some important players within their invasive species initiatives. She mentioned how S. Franklin testified before Congress as an example of the important role that ISAC members can play. She has found the ISAC meetings to be an important forum for engagement between federal employees and stakeholders. The white papers represent a tremendous amount of work, but productivity has somewhat outpaced the ability of agencies to process and respond to those deliverables. She suggested that the topics are well targeted, but for some papers there is limited capacity to address the recommendations. For others, such as the wildlife health white paper, recommendations and work has already been integrated.

Keith Gaddis (NASA) noted that a lot of the recommendations are policy heavy, while NASA focuses on science-based recommendations. For example, this year NASA has funded a project on eDNA. NISC provides a venue for NASA to better understand how that work can fit into what other agencies are doing and the relevant individuals.

Ed Clark went back to S. Simon's comment about how USDA has things covered and wanted to check that was indeed the case. If things are working behind the scenes, those on the outside may not be aware. There is a sense that while good things are happening, there are still huge gaps. S.

Simon responded that implementation comes down to resources and capacity. Where agencies may have the authority to address something, there may not be the resources to address everything. This implies prioritization. E. Clark reflected that what brought him to ISAC was the ability to influence those priorities and how coordination can increase capacity.

Samantha Simon (USDA) also highlighted that there are other coordinating bodies, including the Aquatic Nuisance Species Task Force (ANSTF), Invasive Terrestrial Animals and Pathogens (ITAP), Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW), Federal Integrated Pest Management (IPM) Coordinating Committee, and the Technical Advisory Group for Biological Control Agents of Weeds (TAG). So, within the federal government there are those with technical expertise who are coordinating. What can be forgotten is that USDA has a mission and goal, DOI has a mission and goal, and sometimes those can conflict. Her role is to take the work of those groups and raise the awareness within USDA.

Slade Franklin asked the federal representatives about the ISAC white papers. H. Smith replied that the white papers are good at identifying issues and policy gaps. She distributes them internally to DOI. There has not been a prioritized list of the related recommendations. They are looking for more exchange with NISC principals to provide prioritization of the ISAC recommendations. The reaction has been “these are great, but it is a resource issue” or “we are addressing that already.”

William Hyatt mentioned that when recommendations come out, there is some discussion. Implementation might be hindered by resource constraints. So, it might be good to note how decisions are made and priorities set. H. Smith suggested that this has changed over time. When there were more frequent meetings, DOI would give an agency report at the next ISAC meeting. Input from her has not been requested recently. S. Simon mentioned that her predecessor would provide a point-by-point response to the ISAC recommendations, and that her own approach has been to look at recommendations holistically: does it apply, are you doing it, should you do it, and are there additional resources needed. Recommendations that have been developed while S. Simon has been in her role have been considered and circulated within USDA. In most instances, they make sense and are seriously considered. Two particular white papers are questionable in the feasibility of their suggestion for positions in NISC for a state coordinator and tribal liaison.

Annie Simpson (USGS) described how, as chair of FICMNEW, they would occasionally consider ISAC recommendations and use those to focus some discussion at a technical level. S. Simon stated that it is really important that ISAC and NISC departments have conversations on a routine basis so that what is requested of ISAC is relevant to NISC agencies. In the past three years much of the advice that has been requested has not come from USDA but rather from the Management Plan that came from the NISC Secretariat. This could be why the advice coming from ISAC has not received full attention and limited USDA’s ability to react. E. Clark suggested that there needs to be a balance between what is requested of ISAC and what ISAC needs to be communicated to NISC members.

Mike Ielmini (USFS) suggested that the Executive Order is not the place to look to for how a FACA group functions. It is mentioned in the EO but it lacks detail on how ISAC operates. A good example was when the Forest Service used ISAC to help provide input on a Forest Service manual.

William Hyatt noted that ISAC has provided advice where it may not have been explicitly requested, and he asked if there were cases where input has been requested but not delivered. M.

Ielmini said he did not think this has been the case. E. Campbell stated that the federal government is very diverse, and certain white papers might only address a specific need. Perhaps future white papers could be vetted by the agencies. E. Clark said that the Management Plan was supposed to help target topics for ISAC. S. Simon reported that the USDA did not sign off on the Management Plan. S. Burgiel replied that all NISC principals signed off on the Management Plan and continued by stating that the most recent Management Plan took NISC into a new direction that would see ISAC playing a more prominent role in implementing that plan. Discussions are ongoing regarding how the Management Plan is formulated. S. Simon stated that agencies are talking to each other and advice is welcome, but that advice should be tempered by the reality that agencies may not have the ability to respond.

Chuck Bargeron noted that there has been a breakdown in policy liaisons having real communication with each other. Perhaps the main ISAC recommendation is that the policy liaisons meet on a regular basis to coordinate and communicate. He then inquired whether agencies have used recommendations, yes or no? E. Campbell replied yes, as with the wildlife health paper. C. Tam replied yes in some areas, but not on everything. Mike replied yes, with the caveat that agencies focus only on some issues.

Stas Burgiel closed by noting that the conversation has been insightful as to the Management Plan and requests for input from ISAC. The conversation provides fertile ground for further discussion.

Stas Burgiel gave a brief summary of written stakeholder comments received up to that point. Comments were received from the following individuals (see [Stakeholder Comments document for content](#)):

Janet Clark (Former ISAC Member), ,
Kimberly Johnson, Fremont County (WY) Weed and Pest Control District
Rod Walker, Blue Ridge PRISM
Melissa Bravo, Meadow Lake Farm Consulting Services
Ken Meyer, K.E. Mayer & Associates
Margaret O’Gorman, Wildlife Habitat Council
John Cantlon, Healthy Habitats Coalition
Mike Bald, Got Weeds?
George Beck, Colorado State University
Bonnie Harper-Lore
Faith Campbell, Center for Invasive Species Prevention
Mindy Wilkinson, Primum Terrae LLC

Working Lunch (Member Updates)

William Hyatt retired from the Connecticut Bureau of Natural Resources in November and is no longer associated with the Association of Fish and Wildlife Agencies. This has enabled him to become more engaged in the State of Connecticut legislative process. There is an upcoming public hearing on invasive species, which will be an opportunity for him to address funding issues that he could not address in his state capacity. He states that continuing to have an AFWA representative on ISAC would be valuable.

Slade Franklin took Hilary Smith (DOI) and Samantha Simon (USDA) on a tour in Wyoming. A new occurrence of medusahead grass was found along the interstate of Wyoming. It was found in July and two weeks later it was sprayed; the ability to act quickly is a unique capacity of the county.

Chuck Barger received a promotion to become co-director of his program. His group continues to work on various ongoing projects.

Blaine Parker received two Bureau of Indian Affairs grants to survey for quagga and zebra mussels in coordination with the tribes. They will be working with each of their four tribes to hold workshops, seminars, and presentations aimed at increasing awareness. He is also searching for funding to study invasive crayfish and the effects of their removal on the river's ecology.

Ed Clark is working on the PBS series, *Untamed*. They are now halfway through filming the first season, which will look at a variety of conservation issues, and what individuals can do to help address them. It premieres regionally on May 2nd but will also be available to stream online.

Janis McFarland reported that the Weed Science Society held their annual meeting earlier in February. The keynote lecture addressed invasive species and their impact on trade. Next year the meeting will be in Maui in early March and J. McFarland hopes to have a symposium on invasive species. There has been a lot of progress in new technologies, including pesticides and CRISPR. She says that it's important for ISAC to source the scientists who work on these issues to provide input on policy-related matters. Syngenta has been doing a lot of work on net conservation benefit pilots to protect endangered species.

Sean Southey and his group are now running environmental campaigns in several countries around the world. Under the Convention on Biological Diversity, 194 signed governments will set new biodiversity goals in November. Much of the work of that group is aimed at getting high-level messaging consistent. He continues to work with the NISC Secretariat on a short documentary.

Afternoon Session – Task Team Discussions

Members of ISAC reconvened at 1:35pm to work on the retrospective recommendations and ticks task team collectively instead of breaking out into two groups. C. Barger facilitated a review of the morning meeting events with the following conclusions: the NISC Secretariat Policy Liaisons/Senior Advisers need to meet regularly.

ISAC then began discussions on producing a retrospective review of ISAC recommendations by looking at resource documents, which provided general background and a record of ISAC recommendations to the NISC. They observed that older recommendations were more procedural and recent recommendations were more thematic in nature. It was noted that the new Executive Order 13751 does not provide additional direction to the ISAC on how to formulate or review ISAC recommendations to the NISC.

ISAC discussed the scope and direction of the retrospective review paper and concluded that it should review how unresolved past recommendations can apply to the current Administration's priorities and should provide future ISAC classes with lessons learned/best practices for moving forward. It was cautioned not to duplicate last year's recommendation for the NISC members to

meet, but rather prioritize that the NISC Principals meet. The level to which ISAC should be prescriptive to the NISC was discussed.

ISAC then addressed how they receive solicitations for advice and if/how they should change the way they provide advice to the NISC. The 2019-2021 NISC Management Plan is currently under development. Any priority recommendations ISAC makes for inclusion in the next Management Plan should be considered. ISAC members voiced concern over providing unsolicited advice, and, given the different missions of each department, offered that topics for ISAC work agendas need to be provided by the departments. The retrospective review paper was not requested by a NISC member. The stakeholder forum tomorrow, the 27th, is an opportunity to discuss further.

Ed Clark noted frustration that ISAC recommendations are not meant for the programmatic level and yet the policy level leaders have not seen ISAC recommendations and that NISC members are not open to receiving unsolicited advice (even horizon scanning).

Chuck Bargeron facilitated a discussion on ISAC duties/responsibilities and noted ISAC is to provide advice “as requested by the Council.” They continued to discuss the structure of ISAC communications through a DFO with the NISC members.

In light of the uncertainty around the continuation of ISAC, ISAC discussed including lessons learned in the retrospective review paper for value added to future ISAC members (to include institutional memory, benefits of ISAC, operation procedures). The paper should consider how the landscape of Administration priorities has changed, shifting state roles, EDRR, and the supportive roles of the federal agencies—and how ISAC recommendations fit into this. ISAC continued to discuss the current state of internal federal communications and capacities and ISAC’s role in commenting on them. C. Barger suggested collecting the best practices of other FACA committees.

ISAC discussed how to structure and make this retrospective paper different from a similar paper from last year. S. Southey recommended that instead of a “retrospective” perspective, the paper should be a forward-looking evaluation. ISAC can request that the federal agencies provide them with information on their internal communication structures.

ISAC discussed who their targeted audience should be (e.g., agency liaisons, principals, NISC members).

Janis McFarland noted that in support of the NISC members, it could be aimed at the staff level.

Ed Clark recommended looking at whether ISAC recommendations are advocacy-related and should be aimed at legislators or whether they can actually be implemented at the agency level. Consequently, ISAC should be aware of whether the process or the product is broken. The ideal process would be that a NISC member department solicits advice on an issue and then ISAC reviews the issue in an interactive manner with the relevant agencies.

Chuck Bargeron voiced the opinion that if ISAC is to be successful, the NISC member departments must provide ISAC with a list of “needs.”

Sean Southey noted that in addition to a wish list, it is also important for ISAC to be able to offer related perspectives or issues that the NISC member agencies may have missed. We need a process for iterative management as the NISC Management Plans change.

ISAC then discussed the future function of ISAC if the committee is underfunded, understaffed, or not diverse in representation. They discussed past ISAC meeting organization and NISC member agency involvement in developing ISAC meeting agendas.

Stas Burgiel (DFO) cautioned that issues could arise with federal staff pushing programmatic-level agendas. The current process utilizes a DFO to ensure ISAC's freedom while allowing federal input. He noted that there is a clear need for guidance from NISC member department input that is prioritized and tailored to ISAC class expertise.

Janis McFarland noted that NISC member agencies could benefit from ISAC reviewing their strategic work plans and providing advice on technology and outreach as goals and priorities change over time.

Break: 2:45 PM – 3:15 PM

Continuing discussion on lessons learned, **Chuck Barger** facilitated a discussion on where ISAC has been successful, unsuccessful, and what can be done better. Successes include the managed relocation, biocontrol, and wildlife health papers as they facilitated agency discussion or were included in policy development. ISAC discussed which aspects of these papers contributed to their success. ISAC addressed challenges such as finding a process to solicit NISC member requests and identify agency ownership and coordination for implementation. A less successful venture was the paper on improving federal-tribal coordination, which lacked a clearly defined scope of work.

ISAC discussed ways they can improve, including timelines of advice development, lack of outreach/visibility, the islands paper, and the differences of the ISAC process between the federal/state and federal/tribal coordination papers.

Chuck Barger noted that task teams' work flows better than standing subcommittees. A structured process of check-ins and a federal champion would be useful. ISAC members suggested a new process that establishes best practices and includes a federal champion from a NISC member department, who could help with problem formulation and output metrics.

William Hyatt noted the need for broad, significant ISAC membership in order to address an array of problems and have the capacity for a new process with a federal champion.

Slade Franklin suggested ISAC put out a call for written comments on how ISAC can improve. Two benefits of ISAC were noted: 1) J. McFarland noted the value of the informal networks that ISAC members provide; and, 2) S. Franklin noted ISAC serves as a single place to bring in varying perspectives at the national level on invasive species.

ISAC reviewed the public written comments and discussed options for receiving past ISAC member feedback on the aforementioned framework.

Public Comment

Lee van Wychen, Weed Science Society of America, expressed concerns about the future of NISC and ISAC, and stated that there needs to be an advisory committee. Those stakeholders are needed to bring in input from the private sector, public, and NGOs.

Lee added that APHIS has forgotten about aquatic weeds, including *Hydrilla*, which has expanded to over thirty states. *Hydrilla* is the most widely dispersed of the federally noxious weeds. Federal resources are required to respond to it.

He also recommended better and broader use of certification processes. For example, certifying that agricultural equipment, like combines, are weed and seed free before moving to new fields.

End of Day 1 – 5:00 pm

Wednesday, February 27, 2019 – Federal Roundtable

Opening Remarks/Announcements

ISAC Chair **Chuck Barger** open the second day of the meeting at 9:05 am. ISAC members and department representatives introduce themselves. He then provided a summary of the previous day's proceedings.

Update from the NISC Secretariat, *Stas Burgiel, Acting Executive Director*

Stas Burgiel presented an update on the NISC Secretariat. The NISC Secretariat is close to wrapping up the items in the 2016-2018 NISC Management Plan and a report card on progress is available. Core activities include early detection and rapid response, data mobilization, legislative analyses, regulated species lists, and responding to department needs and requests. The Secretariat is also working on emerging issues, including advanced biotechnology and gene editing, ticks and vector-borne diseases, infrastructure, challenges, and the Digital Makerspace. The NISC Secretariat's role is one of coordination. It facilitates a monthly Community of Practice call, coordinates nationally and internationally on Arctic issues, coordinates ISAC, and engages with departments and non-federal partners.

The NISC Secretariat has a reduced capacity due to ongoing and upcoming staffing issues but remains engaged with each of the member departments to determine new priorities for the next Management Plan. All current ISAC members term off in May, and the Secretariat is working to retain their institutional knowledge while future directions are determined.

NISC Department Reports

Scott Cameron (DOI) reported that the president has nominated David Bernhardt to be the new Secretary of the Interior. In August of last year, Interior went through a process of reorganization, which is a process that is still ongoing. Interior is actively pursuing opportunities to enhance how NEPA matters are handled, including broader categorical exclusions. In the Interior appropriations

bill, there is a direction from Congress to work with the Western Governors' Association on a comprehensive approach to EDRR on invasive mussels in the West. Interior continues to have a strong interest in EDRR; how that interest is manifested will be affected in part by how Interior's new regional boundaries are operationalized. Fish and Wildlife Service is updating the five year plan for ANSTF.

Jessica Kondel (DOC/NOAA) reported on two NOAA projects linked to their seafood priorities. NOAA continues to engage with the lionfish issue, and has a response plan available on their website. As part of this engagement, NOAA scientists have developed an "Eat Lionfish" campaign, which was launched in DC. Steve Gittings' work on lionfish trapping was featured in the Smithsonian Magazine. Additionally, NOAA ordered a grant to investigate the viability of a green crab program in New England and to increase fisheries dedicated to green crab. NOAA also works with eDNA to detect non-native fish, such as invasive walleye. NOAA's efforts in the current fiscal environment are limited, but they continue to work to find ways to advance invasive species issues in relationship with their departmental priorities.

Samantha Simon (USDA) reported that in October, USDA declared that pink bollworm has been eradicated in the US, which enabled restrictions to be lifted. USDA continues to work on feral swine issues and has seen significant reductions. USDA declared two Ohio communities free of Asian longhorn beetle, and work continues in other states. Spotted lanternfly and emerald ash borer continue to be priorities and USDA is looking at biological controls to respond to those invasions. Last year, USDA provided almost \$70 million under the Plant Protection Act and has allocated \$66 million this year to support projects. Budget issues are an ongoing challenge. The Forest Service has received a lot of attention recently in relationship to managing wildfire. The National Invasive Species Information Center website has been relaunched.

***NOTE:** During the USDA update, **Lee van Wychen, Weed Science Society of America (PUBLIC)**, stated that Section 10007/Plant Pest and Disease and Disaster Management Program (~\$70 million) is not funding any weed or mollusk pest grants. Samantha Simon stated that it was, but that is not the case for weeds. Samantha will take this feedback to USDA.*

Capt. Eric Hoffman (DOD) provided an update on DOD's Pacific Biosecurity work. The Brown tree snake program continues to be a success in Guam, and DOD has solicited for a trap to be made to address brown tree snake issues. DOD is working to address spotted lanternfly and longhorn tick and their effect on DOD operations. DOD has requested that the NISC Secretariat establish an ISAC task team on ticks and vector-borne disease.

John Sagle (DHS/CBP) gave an update on the CBP restructuring, including the establishment of a team that works on building systems and working with data to aid targeting analytics. CBP still coordinates regularly with APHIS. They have improved operations in their woodborer protection work, but it remains an ongoing challenge. The recent Farm Bill and the deregulation of hemp has created challenges in CBP operations, and they are working on a review.

Julia Doherty (USTR) reported that USTR has worked on several initiatives of interest to ISAC over the last year. One such initiative is an international statement on the agricultural application of biotechnology. They are looking at how World Trade Organization (WTO) members are implementing biotechnologies to establish and maintain pest-free areas. They are also looking at how to help countries develop streamlined processes to apply integrated pest management

consistent with their rights and obligations under the WTO's agreement on the application of sanitary and phytosanitary measures.

Victor Bullen (USAID) reported that USAID programs such as Feed the Future have helped developing countries reach self-sufficiency and address the stumbling blocks of invasive species. USAID has ten ongoing projects with funds committed to the prevention and control of invasive species. They have ~60 pest evaluations that cover pesticide use, food storage, and other issues pertaining to the control of invasive species. V. Bullen mentioned USAID's successful work with the tomato leaf miner in Nepal.

NOTE: During the USAID update, ISAC member E. Clark asked about USAID's collaboration with other agencies, such as CBP on exports. V. Bullen answered that USAID does not have an MOU but collaboration may happen at the lower level. There is further discussion on the role of economic analysis in the various departments' and agencies' invasive species work.

Woody Turner (NASA) reported on NASA management of invasive species issues in their various projects. Their interest in ISAC and NISC has been one of getting input on where they should focus their projects. They launched three missions recently that pertain to invasive species. Integrating satellite data and in-situ data will be a continuing priority.

Break: 10:30 AM – 10:45 AM

NISC Roundtable Discussion

Upon reconvening, Ted Boling, White House Council on Environmental Quality, introduced himself to the Committee.

Participants then discussed the four questions previously posed by ISAC:

1. What specific federal activities or processes for invasive species management need attention?
2. What specific emerging issues does NISC need to prepare for?
3. Where should specific coordination efforts within the federal government and with non-federal partners be focused?
4. How has ISAC been effective and valuable to NISC, as well as more broadly?

Slade Franklin asked if S. Cameron could provide clarification on the categorical exclusions issue. S. Cameron provided clarification on NEPA compliance requirements, environmental impact determinations, as well as environmental impact statement (EIS) and environmental assessment (EA) grounds for exclusion. He noted that DOI is developing new NEPA categorical exclusions to expedite eradication and control efforts. H. Smith (DOI NISC Senior Adviser) noted the USFWS is reviewing rapid response, management activities, and species to expedite. They have completed a data call from the field and are reviewing it to determine a request for categorical exclusions supported by data. Ted Boling noted there is a database that catalogues all categorical exclusions to improve coordination through terminology standardization and information sharing. Roundtable participants further discussed the categorical exclusion and data collection process and key players/roles.

Slade Franklin asked, with respect to the recent USFS treated lands report and Executive Order 13855, how USDA and DOI are both going to meet those requirements without increased funding? S. Simon and S. Cameron noted that USDA and DOI are currently discussing a strategy plan and are incorporating the shared stewardship perspective to focus on the needs of the state from a landscape scale that the federal government can support. Roundtable participants further discussed the status of treatments and expanding authorities through legislation.

Ed Clark asked the group how they approach diverse internal missions that vary by bureau in terms of prioritizing management activities on lands that cover multiple jurisdictions? S. Cameron noted that each agency has specific authorities with priorities defined by statute. DOI uses a department-wide strategic plan and 195 performance metrics to identify activities and functions shared among bureaus.

Chuck Barger asked whether the ISAC paper on harvest incentives was used when developing their invasive species programs on lionfish and invasive crabs (“eat it to beat it”)? J. Davis (NOAA NISC Senior Adviser) noted that because NOAA doesn’t have a budget line for invasives, their work is always centered on impacts to trust resources. The ISAC paper was helpful to have as a resource to point to for advancing NOAA’s mission on competitiveness and showing that these projects had support from the invasives community.

Janis McFarland asked the group where they see added value in ISAC to help in interagency projects and invasive species policy? S. Cameron emphasized that with the present Administration change, it is important for federal agencies to communicate with FACA committees on priorities and challenges (the burden of communication is on the agencies). He encouraged ISAC members to stay up to date on invasive species-related themes and messages that would resonate with the current Administration (e.g., regulatory reform, fire/forest management, border protection). S. Cameron offered that ISAC can pitch ideas to NISC.

John Sagle asked ISAC how policy liaisons can be more efficient. He suggested ISAC can narrow the list of priority issues and present realistic projects to NISC (like agency management plans that are concise, realistic, and achievable).

Jeanette Davis noted that regulatory reform and streamlining are relevant themes for NOAA. She noted that ISAC can present specific areas and challenges with ESA and NEPA, emerging technology interests, etc. that relate to NOAA, and she can bring them back to leadership for consideration. Because resources are tight, it would help NOAA for ISAC to identify opportunities to partner on these themes.

Scott Cameron emphasized the regulatory theme and ways for DOI to improve how EPA, FWS, and USDA work to approve pesticides. He suggested that a short white paper may be useful on improving efficiency and speed to bring new products to market to eradicate or control invasive species.

There was additional discussion on ISAC white papers, their timelines and consequent relevancy, and what are relevant content/writing styles. They also discussed ESA Section 7 consultation streamlining issues. C. Barger noted that the current ISAC class’s term ends in May 2019, resulting in a gap in membership as the four current nominations for ISAC Class 10 are still under

review. He expressed frustration that this delay in securing a new ISAC class is preventing good work from being done, and asked for clarification on a path forward for ISAC. S. Cameron briefly addressed the nominations process and status of applicants for the ISAC Class 10 nomination cycle.

Chuck Barger told the NISC representatives that ISAC is working on a list of improvements and emphasized the need to have dialogues similar to this roundtable in order for ISAC to develop products that are actually useful to agencies. S. Simon informed the ISAC that USDA has direction from their Secretary to explore other avenues for public advice outside of FACA committees as USDA resources decrease. She questioned ISAC's value in relation to other sources of stakeholder advice and noted that if ISAC continues, USDA needs to know what ISAC is working on, how federal agencies are involved in problem formulation, and whether federal agencies are utilizing ISAC products. ISAC can't cover all of USDA's interests (thematically through expert representation on ISAC) and USDA needs as broad of a perspective as possible.

Sean Southey asked the group if they have mechanisms in place for coordinated messaging across the federal government? S. Simon noted that there is a gap, but that it is recognized and being addressed. She mentioned current efforts like the "don't pack a pest" program and emphasized that the challenge is facilitating relationships to amplify messages of current campaigns.

William Hyatt provided an overview of the state-federal coordination white paper and asked for feedback on its relevance and implementation status. S. Cameron reviewed DOI's efforts in state-federal coordination on invasive species issues, such as work with the WGA and states on mussels, which reflects the spirit of the recommendations in that white paper. DOI's reorganization to unified regions will also help improve coordination and focus. He opined that they are generally better off modifying existing institutions rather than creating new ones such as the recommended state-federal coordination committee.

Samantha Simon seconded the desire not to have another staff position or committee involved and provided examples of existing state coordination efforts. She noted it will be helpful for ISAC to identify what's not working effectively and efficiently and adjust to meet the federal government's needs. USDA already operates on state-driven feedback.

Jeanette Davis noted that NOAA is unique because they are focused on oceans and the white paper's recommendations don't directly apply. She suggested there was opportunity for ISAC to partner with ANSTF. NOAA is currently working on their year plan, and she will look at how they are equipped to do state and regional coordination.

Working Lunch

During lunch, ISAC conducted general housekeeping business. They reviewed the minutes from the November 13, 2018 Teleconference Meeting, appointed their chair, and further discussed the morning session. They also considered strategies for subcommittee work on the retrospective and tick papers.

Regarding the teleconference minutes, E. Clark called out a typo where his affiliation should be listed as "Wildlife Center of Virginia". At the top of p. 4 it should read "his interest" not "his interested". S. Franklin moved to except the minutes as modified. Seconded by Ed Clark.

The minutes were unanimously approved with the agreed upon modifications.

Slade Franklin made a motion nominating C. Bargeron to continue as ISAC chair, and B. Parker to continue as ISAC Vice-Chair. Seconded by J. McFarland.

ISAC unanimously approved Chuck Bargeron and Blaine Parker to continue as ISAC Chair and Vice-Chair, respectively.

Chuck Bargeron communicated that he had discussed extending ISAC terms with S. Cameron. He asked the group if everyone would be willing to serve past May. S. Franklin desired to wait until May to decide.

Stas Burgiel noted he would talk with S. Cameron about ISAC's status, and that he could go forward saying that "a majority of ISAC members are willing to extend their terms if requested by the Secretary of Interior".

C. Bargeron expressed appreciation to the chairs running the morning session and to J. McFarland for sponsorship of the coffee break.

Lee Van Wychen (WSSA) provided an update on the status of the "Partners for Fish and Wildlife Program" Act (S.268) and mentioned the requirement of certain percentages: not less than 75 percent for on-the-ground control and management of invasive species, not more than 15 percent for investigations, development activities, and outreach and public awareness efforts, and not more than 10 percent for administrative costs. M. Ielmini (USFS) commented that the language is to leverage invasive species attention to add power to the fish and wildlife conservation act. S. Franklin commented that the language implies a fairly broad description of on the ground action.

Janis McFarland questioned whether federal agencies were getting together to discuss and formulate the NISC Management Plan. S. Burgiel suggested that NISC will pursue such coordination this spring.

Chuck Bargeron asked if ISAC's views on the content of the Management Plan could be a topic of discussion during that afternoon's session. S. Burgiel advised that ISAC should not get ahead of what the NISC principals want, but to make sure there is some consistency in expectations.

Slade Franklin wanted to make sure that the ISAC members had a common understanding of the key points from the morning discussion on issues that could be fruitful for them to address. Collectively, the group reiterated those points as follows:

1. Regulatory reform
2. eDNA and other molecular tools for detection
3. Fire and invasive species
4. Advanced technology
5. Approval process and risk Assessments for pesticides and
6. Glyphosate assessment and issues
7. Areas for partnerships and collaboration.

There was discussion on a strategy for the subsequent breakout discussions. **Janis McFarland and Chuck Bargeron** wanted to engage at the beginning of the tick discussion then go off to work on

the retrospective documentation. For the retrospective, there were questions of how much to focus on successes, suggesting to keep these limited. ISAC will consider soliciting comment and insight from federal agencies, but noted that it should not be too open-ended.

Slade Franklin suggested that some of the critical feedback be included in the retrospective. C. Bargeron suggested that such documentation could be included in the section on “areas for improvements.” B. Parker stated it would be good to get organizational charts for clarity on staff working with or for NISC, NISC Secretariat, and ISAC. C. Bargeron noted that the retrospective will include the “laundry list” of topics for ISAC. S. Franklin suggested that ISAC might want to prioritize such a list. H. Smith added that it might be worth iterating with agencies on clarity and prioritization.

For the retrospective and tick white papers, the due date is mid-May. ISAC would look to have call in late April with date and time to be determined.

ISAC Discussion with NISC Department Technical Staff

ISAC discussed topics gleaned from the conversations with department representatives on Day One and Day Two’s morning session. Federal agency staff were invited to the table with ISAC.

Chuck Bargeron suggests revisiting the questions posed to the group before lunch, on white papers and recommendations. He asks: 1) Are there any topics ISAC addressed in which the *subject* was relevant to your agency, but the *recommendations* were not; and, 2) Could ISAC go back to those topics to craft new recommendations that are more relevant?

There was general consensus among the group that the topics of the papers are relevant and important. Several of the papers were singled out, such as the biocontrol and systematics papers. ISAC recommendations help advance biocontrol programs in APHIS. Several staff members suggested that the recommendations in the biocontrol paper are still relevant and the issue should be revisited by federal agencies.

Craig Martin (FWS) suggested that it would be helpful to have the NISC principals buy in to these issues. ISAC member E. Clark responded that there is significant bipartisan support for these issues and to align ISAC and NISC’s activities to the interests of the administration would be helpful in advancing the issues.

Earl Campbell (USGS) raised the point that there is inconsistency in the recommendations and white papers pertaining to the role of ISAC. Making sure that role is defined and the process by which the recommendations are handed over and implemented would be valuable.

Chuck Bargeron explained that the ISAC recommendations, by and large, are addressed to NISC itself. E. Clark stated that the Council’s failure to meet has been a major barrier to the implementation of recommendations.

Samantha Simon (USDA) suggests that the conversation needs to begin with the federal departments so that they can come up with the topics that they would like advice from ISAC on.

Chuck Barger acknowledged that those conversations and meetings within the federal government should be happening. A number of speakers agreed that an increased role of federal agencies in the conversations that produce recommendations would help target them to where they can be most effective.

Chuck Barger took the biocontrol paper as an example, and asked if the body of the paper needed to be written or if the recommendations alone were of value?

Annie Simpson (USGS) reiterated a point from the previous day that the substantive portion provides the scientific backbone to the recommendations, and therefore both are important. Recommendations need to be backed by good science. However, ISAC would be able to respond more quickly to federal needs if a lengthy paper writing process was not involved.

Doug Burkett (DOD) questioned whether the white papers had ever resulted in any major policy changes but noted that they have been nonetheless timely and valuable.

The group discussed pesticides and other chemical tools for addressing invasive species, as there is a danger of losing the registration on some of these tools. The group also discussed biosecurity and the potential for ISAC to define it in finer detail. The definition could be a critical tool in getting funding. A question was raised about whether such a paper would seek to standardize a term that is used in a wide range of ways, and whether that is in the purview of ISAC.

Michael Ielmini (USDA/FS) asked whether there was a decision to do another NISC Management Plan and what its purpose would be.

Stas Burgiel responded that the NISC Management Plan relates to the NISC Secretariat's capacity and is not intended to be an overarching national invasive species management plan. The process for deciding what would go into the next NISC Management Plan has already begun and the principals are scheduled to meet in the future to discuss that.

Public Comment

There was no public comment.

End of Day 2 – 4:30 pm

Thursday, February 28, 2019 – ISAC Work Session

Opening Remarks/Announcements

ISAC Chair Chuck Barger opened the final day of the meeting at 9:03 am.

ISAC Task Team Discussion (Retrospective on ISAC Recommendations)

Chuck Barger facilitated discussion on the retrospective review paper and a review of previously discussed recommendations and actions:

1. ISAC recommends that NISC holds regular policy liaison level meetings

2. ISAC should redefine the ISAC process of operation
3. The target audience for ISAC products and recommendations should be NISC Principals and future ISAC members

ISAC then discussed the merits and challenges of including the following items in their list of successes, areas of improvement, and more effective processes and policies moving forward:

1. Successes: Biocontrol paper, regulatory reform streamlining, managed relocation paper, wildlife health paper, USFS policy review, biofuels, biotech paper, definitions paper
2. Areas of improvement: state and tribal paper, islands topic (never completed), better definition of roles
3. Future processes and policies:
 - a. ISAC members recognize that ISAC can be used to help with processes, define action items, review documents, and make recommendations.
 - b. ISAC needs a clear call to action and problem definition, a process to surface agency requests, defined metrics, defined timeframe to ensure value to client, and an agreed upon process for engagement between clients and ISAC.
 - c. ISAC requires identified federal champions for requested projects who would assist in problem formulation and metrics development.

ISAC members discussed the benefits and challenges to the size and composition of ISAC. One main benefit of ISAC is their use of networks to support and fill expertise gaps. ISAC member voiced concerns on upcoming changes that will affect the quality and impact of ISAC products.

Process improvement suggestions and ISAC recommendations:

1. ISAC should be composed of a small group with mixed perspectives and strong external experts,
2. Task teams should meet regularly to tackle problems and include external members as appropriate,
3. NISC departmental leads should hold regular meetings, and
4. More funding is needed across the board for invasive species issues.

ISAC reviewed their charter and bylaws in consideration of ISAC process changes of meeting frequency and use of task teams. ISAC discussed how clients could facilitate ISAC or task team meetings.

ISAC Task Team Discussion (Invasive Ticks)

This session was attended by ISAC and NISC Secretariat Staff with additional federal representatives to provide technical expertise and help to frame the problem statement (Captain Eric Hoffman and Doug Burkett, DoD; Hilary Smith, Annie Simpson, Earl Campbell, DOI; Mike Ilmini, USDA. Joining by phone were Danielle Buttke, NPS, and Camille Harris, USGS). Additional expertise was provide by staff at the Wildlife Center of Virginia (Peach Van Wick, DVM, and Ernesto Dominguez, DVM).

Ed Clark introduced the purpose of the session, which was to help clarify the problem statement and develop a strategy to get to a useful ISAC deliverable from the task time in time for consideration by the full ISAC team at their May 2019 teleconference meeting.

Captain Eric Hoffman outlined DoD's concern. Essentially, ticks are a problem that impact human and animal health. For DoD the human health impacts have direct consequences for troop readiness and operations. He outlined the variables involved as:

1. Humans, who are the primary concern, for their health and ability to carry the disease and transport ticks;
2. Animal disease reservoirs and ticks serving as the vector of the disease; and,
3. Habitat that can limit or promote both the tick or reservoir animal populations.

It is the habitat variable that DoD is asking ISAC to explore with the key question: What are the impacts of invasive species within tick/reservoir habitats and how do those invasive species facilitate tick-borne diseases?

DoD is asking for a third party assessment on the influence of invasive species on ticks. They are looking for an indication of how significant invasive species are with respect to ticks and if control of invasive species can have a positive influence on reducing disease and therefore promoting armed forces health protection.

Doug Burkett, DOD, provided additional background information with numbers of disease incidents across the armed services, broken down by year. Both he and Eric suggested that, like figures from the general population, actual incidents are likely underreported.

Blaine Parker asked about infection rate and any attempt by the military to check reported cases vs. any mandatory screening. D. Burkett confirmed that the number came from those self-reporting to a medical treatment facility. E. Hoffman stated that we do not really know the extent of the problem, but extrapolating from national information, the numbers are probably low. B. Parker suggested that it might be worth considering a more structured, statistically representative survey.

Doug Burkett provided information on Lyme disease by state and installation and a map of general areas of known occurrence for multiple ticks. Considering these series of maps and tick ranges, B. Parker noted that there could be some utility in an examination of the leading edge, where ticks are spreading the most quickly.

Danielle Buttke, NPS presented on NPS efforts. NPS has significant concerns about disease in both park staff and park visitors. There are unique habitats within a park, often different from the surrounding area, which can make the park more prone to ticks and/or reservoir animal populations. NPS is also concerned about fundamental changes to the park caused by tick and related disease and mortality. D. Buttke highlighted the close proximity of many NPS units to DoD installations. S. Southy asked about how well the concern has been communicated. E. Hoffman replied that the public health sector of DoD is doing a great job at communicating risks and actions.

Dr. Ernesto Dominguez of the Wildlife Center of Virginia suggested that it would be useful to know where the patient believes they became infected; which is important for epidemiology.

Janis McFarland asked about testing and time since infections. E. Dominguez explained how, due to the testing method's dependence on antibodies, the infected person (or animal) would

need at least 14 day post-exposure to allow for detection. E. Dominguez described the Wildlife Center of Virginia's survey of ticks through passive surveillance of tick occurrence on animals coming to them.

Dr. Peach van Wick of the Wildlife Center of Virginia added that the majority of animals that have longhorn ticks have been white tailed fawns. She asked if DOD was tracking disease cases of dogs (service or pets) or other animals living on bases. E. Hoffman responded that DOD has a vet core and they should have information on any animal diseases treated. This is another area to explore. D. Burkett described the three types of sampling being done by DOD: clinical samples, ticks that have been submitted, and environmental sampling (e.g. drag for ticks or off of deer). There may be an opportunity for more effective data sharing and communication across these sampling activities. E. Hoffman indicated that the ultimate goal is a long-term strategy for prevention and added that part of the recommendation could be suggestions on a robust surveillance program.

Ed Clark suggested expanding the question beyond just invasive plants and their impact on ticks. From the ISAC perspective, it would be worth considering that the diseases and vectors themselves can be invasive species. With this, the white paper could consider invasive plants, animals, and pathogens, and their collective interaction with tick-borne diseases. E. Clark suggested that the task team could provide an overview of the players and related work and expertise. Some specific recommendations on how to amplify existing efforts or undertake new or modified approaches. That is, there is an opportunity to draw the circle a little bigger than just invasive plants and ticks as there is the larger context of federal efforts on invasive species and tick borne disease. D. Burkett affirmed that this approach seems to match what they need. E. Hoffman said that a third party document with suggestions on how to leverage efforts and increase efficiencies through coordination could be useful.

Doug Burkett described the "research requirements" report that they put out. The ISAC white paper could identify gaps that could then be included in future research requirement documents.

Blaine Parker asked about preventative measures for military personnel and equipment transported from one area to another; suggesting that there might be some opportunity to monitor for ticks along these transportation and transport vectors.

Ed Clark concluded by presented an outline of issues for the white paper. This was presented and reviewed by the group and will serve as the outline moving forward.

The Task team will work to bring others into the conversation as needed and available. D. Burkett mentioned Brian Allen at University of Georgia who has a Strategic Environmental Research and Development Program (SERDP) grant looking at invasive grasses at five installations.

Doug Burkett's office has set up an APAN site. APAN is an online workspace that can facilitate document sharing and collaboration in general. J. Morissette and D. Burkett will make sure all those contributing to the task team have access to the APAN site.

Slade Franklin brought up the differentiation of ticks being promoted by specific plant species or more generally through plant density. The group agreed that this needed to be considered. S. Franklin suggested that the monoculture of invasive plants does indeed change plant structure and density. If there are some specific plants, that should be clear. But if it is really more any issue of density and canopy structure, then that has different implications. D. Burkett commented that they are looking for some sort of conclusion on how invasive species influence ticks, whether as specific plants or as changing plant density.

There was some consideration of DOD's ability to use chemical treatments. E. Hoffman indicated that the question is fairly complex and usually done on a case-by-case basis. S. Franklin suggested that the paper might want to consider the processes for using chemicals.

Chuck Barger mentioned that any of the work could lead to one or more peer-reviewed publications that would offer an incentive for some of the people who will be involved. With that, it might be worth considering a special issue. J. Morissette reported that the NISC Secretariat was working with several potential co-editors (including D. Burkett) and has agreement from the journal of One Health to consider such a special issue. However, the priority was to focus on the ISAC task team. The resulting white paper could be used, in part, to guide that potential special issue.

Stas Burgiel referenced Federal Advisory Committee Act (FACA) rules that allow for federal staff and outside support to be used as a resource for the task team but that end product comes from ISAC and is endorsed by vote at the next available ISAC meeting. This white paper is set to be considered for approval by ISAC at the May [date], 2019 meeting.

Ed Clark concluded by asking if the plan would suffice for DOD needs. E. Hoffman responded that, based on the discussion, it would. S. Southey stated this process and engagement was positive and suggested that ISAC look to this task team a positive model.

Public Comment

There was no public comment.

The meeting was adjourned at approximately 2pm.