



Workshop

Canadian Airport Wildlife-Strike Mitigation Cooperative Research Program

OUTLINE



- The Need for a Cooperative Research Program
- BSAC Model
- Funding
- Next Steps

Why does Canada need a CAWSM-CRP?



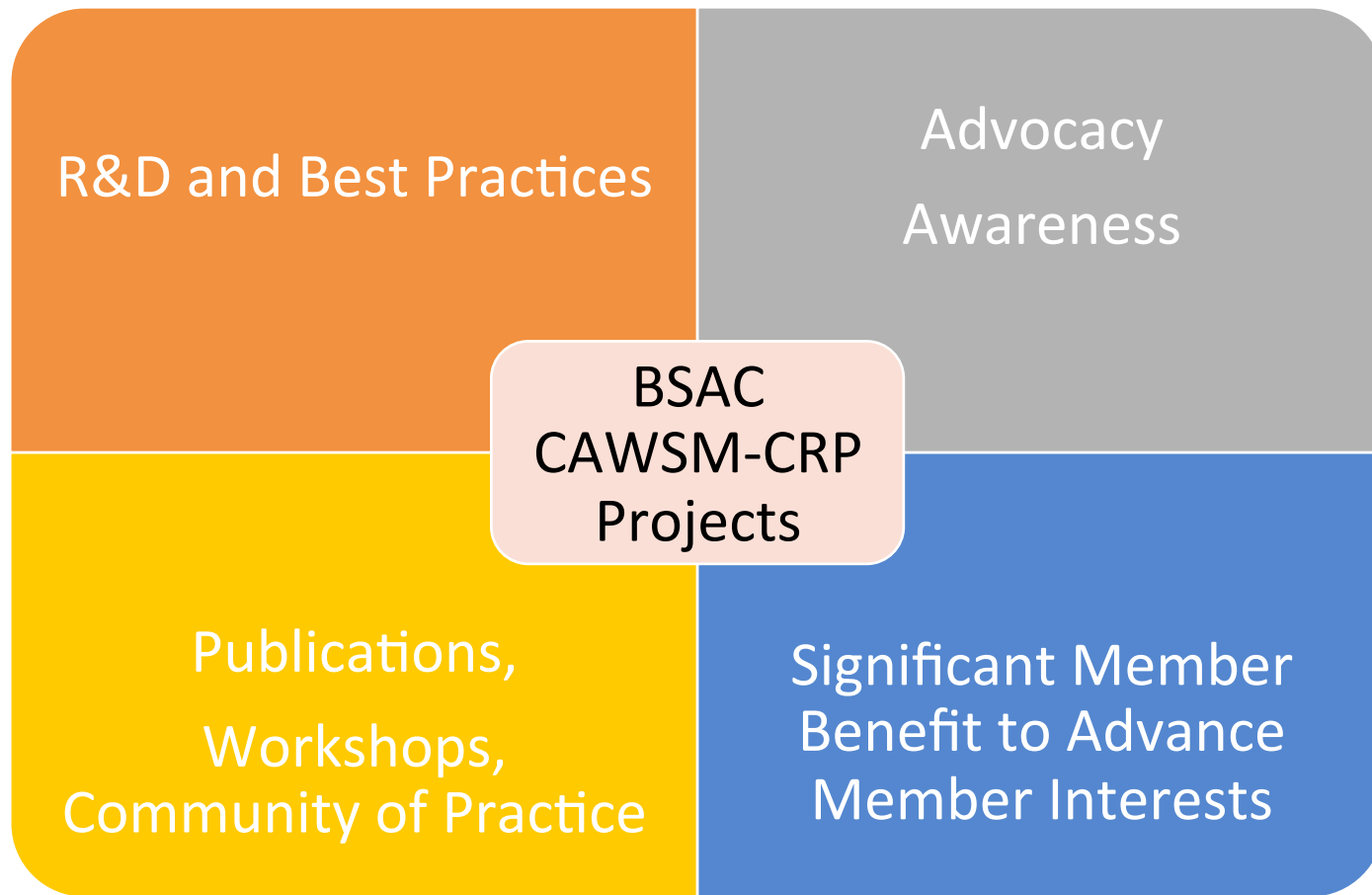
- Wildlife-strikes are a growing concern to aviation safety and affect the entire industry. The nature of threats vary across the country – resolution of those threats may also vary geographically.
- Development of best practices is expensive, time-consuming, and needs to be vetted on a national scale with airport-specific, local tuning. Best practices need to be based on scientific data and testing at airports.
- For practicality and standardization, research should be industry-driven, leveraging resources and expertise for common problems, collaborating to develop best practices, and sharing results and lessons learned
- Since Bruce's death in July 2008, Transport Canada has not been active in R&D for wildlife-strike mitigation. Last TP 8240 Bulletin No. 36, Winter 2006 Avian Radar (emerging technologies). Transport Canada's direction, even before Bruce's death was only to regulate the industry, not to promote the development of it.

.../Why does Canada need a CAWSM-CRP?



- Canada used to be the leader in bird hazard to aircraft R&D – NRC-ACBHA
- In the United States:
 - Transportation Research Board’s Airport Cooperative Research Program (TRB ACRP) – they have mainly focus on summarizing existing information
 - FAA has a dozen centres of excellence across the country including Center of Excellence for Airport Technology (CEAT)
 - USDA-APHIS Research Station at Sandusky, Ohio (testing of wildlife control methodologies)
- BSAC can help Canada recover its role as a leader in wildlife hazards to aircraft R&D through creation of a Canadian Airport Wildlife-Strike Mitigation Co-operative Research Program.

What would a CAWSM-CRP do for BSAC?



Birdstrike Canada CAWSM-CRP Model?



Research Proposals

- BSAC publishes priorities & research goals annually
- Call for proposals from members
- BSAC establishes selection committee & selection criteria
- Selection committee reviews and recommends proposals for BSAC approval
- Birdstrike Canada PM appointed

Execution

- BSAC oversight and review
- Project Team submits detailed Statement of Work (SOW) and Project Charter for BSAC approval
- Project is executed by participants in accordance with Charter and SOW.

Proposal Structure

- Prepared and submitted by BSAC member
 - Must include lead airport partner
 - Participation from other BSAC members encouraged (airlines, consultants, pilots, ATC, industry)
 - Requires (matching) in-kind contributions from participants (facility, existing equipment, personnel)
 - Identifies funding requested from BSAC
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- PM and lead airport(s) report to Birdstrike Canada quarterly.
 - Project Reports typically prepared by Project Team but reviewed by Birdstrike Canada
 - Publications typically approved by Birdstrike Canada before release

How can we fund these projects?



- Short-term funding
 - In-kind funding from project partners
 - Cash-in-kind from airports
 - NSERC or other funding bodies?
 - Sample project: “grass testing and validation”
- Long-term funding
 - Seek annual funding program from Transport Canada
 - Federal fiscal situation moving to surplus
 - We are at a competitive disadvantage to Americans
 - As Birdstrike Canada grows and becomes more recognized, we will become a cost-effective and easy way for Transport Canada to fulfill its mandate
 - Sample project: technology demonstration, technology pilot

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Call for Proposals

- Annually
- Publishes priorities & funding
- Uses team of reviewers to select winning proposals
- Requires in-kind matching of participants

Execution

- Usually industry player does most of the work and receives most of the funding as gov partners usually do not have the capacity to do the work.
- Gov partners are essentially the Customer for the work, and have direct input and oversight to ensure results meet their needs

Project Participant Structure

- Bidder usually industry partner
- Requires lead gov partner who champions the project and receives funds
- Lead gov partner contracts with industry partner
- Clear deliverables are defined in advance and include detailed reporting
- Larger participants groups (communities of practice) are preferred
- Working group meetings facilitate interactions and exchanges
- Publications encouraged

CFP – Project Types

Investment Instrument	Call for Proposals (CFP)				
Project types	Studies		Research & Development	Technology Demonstration	Technology Pilot
	Type I	Type II			
Duration from Project award	≤ 12 months	≤ 24 months	≤ 36 months	≤ 36 months	≤ 36 months
Nominal Funding Range	≤ \$100K	≤ \$250K	≤ \$1.0M	≤ \$1.5M	≤ \$2.0M
Technology Readiness Level (TRL) Range	TRL 1-9		TRL 3-4	TRL 5-7	TRL 7-9

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Next steps?



- Prepare a position paper
 - Get BSAC approval
 - Get letter of support from members
 - Use as promotional item in seeking new members
- Plan priorities/goals for First Call for Proposals (CFP)
- Determine available funding for First CFP
- Begin advocacy to Transport Canada