

Cub Scout Nova Award Workbook

This workbook can help you but you still need to read the Cub Scout Nova Awards Guidebook.

The work space provided for each requirement should be used by the Scout to make notes for discussing the item with his counselor, not for providing the full and complete answers. Each Scout must do each requirement.

No one may add or subtract from the official requirements found in the Cub Scout Nova Awards Guidebook (Pub. 34032).

The requirements were issued in 2015 • This workbook was updated in October 2015.

Scout's Nam	e:				
Counselor's	Name:				
SERVICE PROPERTY.			http://www.MeritBadge	.Org	
3			ons about this <u>workbook</u> to: <u>Wo</u>		
	Send comments or suggestion	ns for changes to the <u>requirem</u>	ents for the Nova Award to: Pro	ogram.Content@Scouting.Org	
	This module is des	igned to help you Tell yo	our counselor what you h	ave learned	
	pose A <i>or</i> B or C and complete Watch an episode or episode species, food chains, biodiver	s (about one hour total) of a		red species, invasive	
	What was watched?	Date	Start Time	Duration	
	Channel, National Geograp to watch a live performance	phic Channel, TED Talks (onle or movie at a planetarium o	found on PBS ("NOVA"), Disc ine videos), and the History C or science museum instead of r counselor's approval and und	hannel. You may choose watching a media	
	Then do the following:				
	1. Make a list of at least two	questions or ideas from what	you watched.		
	1.				
	2.				

Nova WILD!				Scout's Name	e:
	2. Di	iscuss two of the guest	tions or ideas with your couns	selor.	
	1.	4	,		
	2.				
∏ В.	Read ((about one hour total) a	about wildlife, endangered sp	ecies, invasive species, fo	od chains, biodiversity,
_		stems, or wildlife habita			•
	-				
	W	Vhat was read?	Date	Start Time	Duration
	W			Start Time	Duration
	W			Start Time	Duration
	W			Start Time	Duration
	W			Start Time	Duration
	В	Vhat was read?	Date	ary. Examples of magazin	es include but are not
	Bolin	ooks on many topics maited to Odyssey, KIDS	Date	ary. Examples of magazin	es include but are not
	Bo lin	ooks on many topics maited to Odyssey, KIDS	Date nay be found at your local libres DISCOVER, National Geog	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not
	Bo lin	ooks on many topics mited to Odyssey, KIDS do the following:	Date	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not
	Boolin Then Co. 1. M.	ooks on many topics mited to Odyssey, KIDS do the following:	Date nay be found at your local libres DISCOVER, National Geog	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not
	Boolin Then Co. 1. M.	ooks on many topics mited to Odyssey, KIDS do the following:	Date nay be found at your local libres DISCOVER, National Geog	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not
	Boolin Then Co. 1. M.	ooks on many topics maited to Odyssey, KIDS do the following: ake a list of at least two	Date nay be found at your local libres DISCOVER, National Geog	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not
	Bolin Then c 1. M	ooks on many topics maited to Odyssey, KIDS do the following: ake a list of at least two	Date nay be found at your local libres DISCOVER, National Geog	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not
	Bolin Then c 1. M	ooks on many topics maited to Odyssey, KIDS do the following: ake a list of at least two	Date nay be found at your local libres DISCOVER, National Geog	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not
	Bolin Then c 1. M	ooks on many topics maited to Odyssey, KIDS do the following: ake a list of at least two	Date nay be found at your local libres DISCOVER, National Geog	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not
	Bolin Then c 1. M	ooks on many topics maited to Odyssey, KIDS do the following: ake a list of at least two	Date nay be found at your local libres DISCOVER, National Geog	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not
	Bolin Then c 1. M	ooks on many topics maited to Odyssey, KIDS do the following: ake a list of at least two	Date nay be found at your local libres DISCOVER, National Geog	ary. Examples of magazin raphic Kids, Highlights, an	es include but are not

Nova WILD	!			Scout's Name:	
	2. I	Discuss two of the questions	or ideas with your counselo	r.	
		1.			
		2.			
□ C	Do a	combination of reading and	watching (about one hour to	tal) about wildlife, endanger	red species, invasive
		es, food chains, biodiversity,			
	W	hat was watched or read?	Date	Start Time	Duration
		do the following:	antinum an ida an funum culo at co		
		Make a list of at least two que	estions of ideas from what y	ou read and watched.	
		1.			
	•	2.			

	2. Di	scuss two of the question			
	1.				
	2.				
Comi	nlete (NF adventure from the	following list (Choose one that you	u have not already earned) Dis	cuss with
. Comp	iselor v	DNE adventure from the what kind of science, tech off Cub Scouts	following list. (Choose one that you nology, engineering, or math was use Bear Cub Scouts	u have not already earned.) Dis ed in the adventure. Webelos Scouts	cuss with y
. Comp	selor v <u>W</u>	vhat kind of science, tech	nology, engineering, or math was use	ed in the adventure.	cuss with y
. Comp	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u>	ed in the adventure. <u>Webelos Scouts</u>	cuss with y
. Comp	iselor v <u>Wi</u> Diģ Gr	vhat kind of science, tech o <u>lf Cub Scouts</u> gging in the Past	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Compount	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Composition countries	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Composition countries	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with
. Composition countries	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with
. Composition countries	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Composition countries	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Compound	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Compound	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Compound	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Composition	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Compound	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Compound	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Composition coun	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with y
. Compound	iselor v <u>Wi</u> Diģ Gr	what kind of science, tech olf Cub Scouts gging in the Past ow Something	nology, engineering, or math was use <u>Bear Cub Scouts</u> A Bear Goes Fishing	ed in the adventure. <u>Webelos Scouts</u> Into the Wild	cuss with

Nov	va WILD!	Scout's Name:
3.	Explore A.	What is wildlife? Wildlife refers to animals that are not normally domesticated (raised by humans).
	□ B.	Explain the relationships among producer, prey, predator, and food chain. (You may draw and label a food chain to help you answer this question.)

□ C.	Draw (or find) pictures of your favorite native plant, native reptile or fish, native bird, and native mammal that live in an ecosystem near you.
	Why do you like these? How do they fit into the ecosystem?
□ D.	Discuss what you have learned with your counselor.
□ 0.	Biodece what you have loanted with your countedist.

9.

10.

4.

5.

Nova WILD!	Scout's Name:
<u> </u>	Discuss with your counselor the differences between threatened, endangered, and extinct species.
_	
	Discuss how threatened animals or plants could become endangered or extinct.
	How might the loss of these animals or plants affect the ecosystem and food chain?

Nova WILD!	Scout's Name:
	What can be done to preserve these species?
	estigate invasive species.
<u> </u>	Make a list, drawing, or photo collection of at least five mammals, plants, fish, birds, insects, or any other organisms that are invasive in your state or region of the country.
	1.
	2.
	3.
	4.
	5.

2.	Design a presentation (a poster, PowerPoint presentation, or other display) including at least one of the invasive species from your list.
	Explain where they came from, how they got to your area, what damage they are causing, and what is being done to get rid of them. Share your presentation with your counselor and your family or your den.
3.	Discuss with your counselor what an invasive species is, how invasive animals or plants cause problems for native species, and how these invasive species could affect an ecosystem and food chain.

☐ C.	Visi 1.	t an ecosystem near where you live. Investigate the types of animals and plants that live in that ecosystem.
	2.	Draw a food web of the animals and plants that live in this ecosystem. Mark the herbivores, omnivores, and carnivores. Include at least one decomposer or scavenger.
	3.	Discuss with your counselor (using your food web drawing) how the animals or plants in the food web fit into a food chain. Which animals are predators and which can be prey? How does each plant and animal obtain its energy? Describe the energy source for all the plants and animals.
		energy: Describe the energy source for all the plants and animals.
□ D.	Inve	estigate one wild mammal, bird, fish, or reptile that lives near you.
	1.	Create a diorama representing the habitat of this creature. Include representations of everything it needs to survive; its home, nest, or den; and possible threats. You may use a variety of different materials within your diorama (usually constructed in a shoebox or similar container)
	2.	Explain to your counselor what your animal must have in its habitat in order to survive.
		i e e e e e e e e e e e e e e e e e e e

□ E.	Inve	estigate your wild neighbors.
	1.	Make a bird feeder and set it up in a place where you may observe visitors. The feeder could be complex or as simple as a pinecone covered with peanut butter and rolled in birdseed and then tied with a string to an appropriate location, like a tree branch.
	2.	Fill the feeder with birdseed. (Make sure that your feeder does not remain empty once you have started feeding birds.)
	3.	Provide a source of water.
	4.	Watch and record the visitors to your feeder for two or three weeks. (It may take a while for visitors to discover your food source.)
	5.	Identify your visitors using a field guide, and keep a list of what visits your feeder. (Visitors are not always birds!
	υ.	Sometimes deer, rabbits, chipmunks, squirrels, and raccoons visit bird feeders—or the area under the feeder! The kinds of nonbird visitors will depend on where you live. You may want to investigate how to collect the tracks of any nighttime visitors.)
_		
Ш	6.	Discuss with your counselor what you learned about your wild neighbors.

		F.	the Cub Scout Outdoor Ethics Awareness Award OR the Cub Scout World Conservation Award (if you have already earned them for another Nova award)
	5.	Visi	ace where you can observe wildlife. Examples include parks (national, state, and local), zoos, wetlands, nature
			s, and national forests.
		A.	ng or after your visit, talk to someone about:
			The native species, invasive species, and endangered or threatened species that live there. If you visit a zoo, talk to someone about the ecosystems for different zoo animals and whether any of the zoo animals are invasive in different areas of the world. (For example, pythons are often found in zoos, but they are an invasive species in Florida.)
			The subjects studied in school that enable him or her to work with wildlife. Examples of experts to talk to include forest ranger, wildlife biologist, botanist, park ranger, naturalist, game warden, zookeeper, docent, or another adult whose career involves wildlife.
	_		
_	<u></u> 6.	B.	uss with your counselor what you learned during your visit. with your counselor:
	0.	A.	wildlife is important.
			·

Nova WILD!	Scout's Name:
□ B.	Why biodiversity is important.
☐ C. 7	The problems with invasive species and habitat destruction.

Important excerpts from the Guide To Advancement - 2015, No. 33088 (SKU-620573)

[1.0.0.0] — Introduction

The current edition of the *Guide to Advancement* is the official source for administering advancement in all Boy Scouts of America programs: Cub Scouting, Boy Scouting, Venturing, and Sea Scouts. It replaces any previous BSA advancement manuals and previous editions of the *Guide to Advancement*.

[Page 2, and 5.0.1.4] — Policy on Unauthorized Changes to Advancement Program

No council, committee, district, unit, or individual has the authority to add to, or subtract from, advancement requirements. There are limited exceptions relating only to youth members with special needs. For details see section 10, "Advancement for Members With Special Needs".

[Page 2] — The "Guide to Safe Scouting" Applies

Policies and procedures outlined in the *Guide to Safe Scouting*, No. 34416, apply to all BSA activities, including those related to advancement and Eagle Scout service projects.

[7.0.3.1] — The Buddy System and Certifying Completion

A youth member must not meet one-on-one with an adult. Sessions with counselors must take place where others can view the interaction, or the Scout must have a buddy: a friend, parent, guardian, brother, sister, or other relative—or better yet, another Scout working on the same badge—along with him attending the session. If merit badge counseling or instruction includes any Web-based interaction, it must be conducted in accordance with the BSA Social Media Guidelines (http://www.scouting.org/Marketing/Resources/SocialMedia). For example, always copy one or more authorized adults on email messages between counselors and Scouts.

When the Scout meets with the counselor, he should bring any required projects. If these cannot be transported, he should present evidence, such as photographs or adult verification. His unit leader, for example, might state that a satisfactory bridge or tower has been built for the Pioneering merit badge, or that meals were prepared for Cooking. If there are questions that requirements were met, a counselor may confirm with adults involved. Once satisfied, the counselor signs the blue card using the date upon which the Scout completed the requirements, or in the case of partials, initials the individual requirements passed.

Note that from time to time, it may be appropriate for a requirement that has been met for one badge to also count for another. See "Fulfilling More Than One Requirement With a Single Activity." 4.2.3.6.

[7.0.3.2] — Group Instruction

It is acceptable—and sometimes desirable—for merit badges to be taught in group settings. This often occurs at camp and merit badge midways, fairs, clinics, or similar events. Interactive group discussions can support learning. The method can also be attractive to "guest experts" assisting registered and approved counselors. Slide shows, skits, demonstrations, panels, and various other techniques can also be employed, but as any teacher can attest, not everyone will learn all the material.

There must be attention to each individual's projects and his fulfillment of *all* requirements. We must know that every Scout —actually and *personally*— completed them. If, for example, a requirement uses words like "show," "demonstrate," or "discuss," then every Scout must do that. It is unacceptable to award badges on the basis of sitting in classrooms *watching* demonstrations, or remaining silent during discussions.

It is sometimes reported that Scouts who have received merit badges through group instructional settings have not fulfilled all the requirements. To offer a quality merit badge program, council and district advancement committees should ensure the following are in place for all group instructional events.

- A culture is established for merit badge group instructional events that partial completions are acceptable expected results.
- A guide or information sheet is distributed in advance of events that promotes the acceptability of partials, explains how merit badges can be finished after
 events, lists merit badge prerequisites, and provides other helpful information that will establish realistic expectations for the number of merit badges that can be
 earned at an event.
- Merit badge counselors are known to be registered and approved.
- Any guest experts or guest speakers, or others assisting who are not registered and approved as merit badge counselors, do not accept the responsibilities of, or behave as, merit badge counselors, either at a group instructional event or at any other time. Their service is temporary, not ongoing.
- Counselors agree to sign off only requirements that Scouts have actually and personally completed.
- Counselors agree not to assume prerequisites have been completed without some level of evidence that the work has been done. Pictures and letters from
 other merit badge counselors or unit leaders are the best form of prerequisite documentation when the actual work done cannot be brought to the camp or site
 of the merit badge event.
- There is a mechanism for unit leaders or others to report concerns to a council advancement committee on summer camp merit badge programs, group
 instructional events, and any other merit badge counseling issues—especially in instances where it is believed BSA procedures are not followed. See
 "Reporting Merit Badge Counseling Concerns," 11.1.0.0.
- There must be attention to each individual's projects and his fulfillment of all requirements. We must know that every Scout—actually and personally—completed them.

It is permissible for guest speakers, guest experts, or others who are not merit badge counselors to assist in the counseling process. Those providing such assistance must be under the direction of a registered and approved counselor who is readily available onsite, and provides personal supervision to assure all applicable BSA policies and procedures—including those related to BSA Youth Protection—are in place and followed.

[7.0.3.3] — Partial Completions

A Scout need not pass all the requirements of one merit badge with the same counselor. It may be that due to timing or location issues, etc., he must meet with a different counselor to finish the badge. The Application for Merit Badge has a place to record what has been finished—a "partial." In the center section on the reverse of the blue card, the counselor initials for each requirement passed. In the case of a partial completion, the counselor does not retain his or her portion of the card. A subsequent counselor may choose not to accept partial work, but this should be rare. A Scout, if he believes he is being treated unfairly, may work with his unit leader to find another counselor. An example for the use of a signed partial would be to take it to camp as proof of prerequisites. Partials have no expiration except the Scout's 18th birthday. Units, districts, or councils shall not establish other expiration dates for partial merit badges.

[7.0.4.8] — Unofficial Worksheets and Learning Aids

Worksheets and other materials that may be of assistance in earning merit badges are available from a variety of places including unofficial sources on the Internet and even troop libraries. Use of these aids is permissible as long as the materials can be correlated with the current requirements that Scouts must fulfill. Completing "worksheets" may suffice where a requirement calls for something in writing, but this would not work for a requirement where the Scout must discuss, tell, show, or demonstrate, etc. Note that Scouts shall not be required to use these learning aids in order to complete a merit badge.