

HOUSE OF REPRESENTATIVES
COMMONWEALTH OF PENNSYLVANIA

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House Resolution 642 of 2008
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House Game and Fisheries Committee

Matthew Ryan Office Building
Room 205
Harrisburg, Pennsylvania

Tuesday, March 9, 2010 - 9:00 a.m.

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BEFORE:

Honorable Edward Staback, Majority Chairman
Honorable Dom Costa
Honorable Marc Gergely
Honorable Neal Goodman
Honorable Gary Haluska
Honorable Michael Hanna
Honorable John Hornaman
Honorable Deberah Kula
Honorable David Levdansky
Honorable Michael McGeehan
Honorable Harry Readshaw
Honorable Ron Miller, Minority Chairman
Honorable Bryan Cutler
Honorable Garth Everett
Honorable Keith Gillespie
Honorable Mark Keller
Honorable Tim Krieger
Honorable Dan Moul
Honorable Michael Peifer
Honorable Jeffrey Pyle
Honorable Todd Rock
Honorable Curtis Sonney

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1 ALSO PRESENT:

2

Steve McMullen

3 Majority Executive Director

4 Julie Foley

Majority Legislative Assistant

5

Chuck Miller

6 Majority Research Analyst

7 Greg Raffensperger

Minority Executive Director

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1 CHAIRMAN STABACK: The hour of
2 9:00 having arrived, I want to call this
3 hearing of the Game and Fisheries Committee to
4 order.

5 Today the committee is here to
6 accept testimony pursuant to House Resolution
7 642 of 2008, the call for the Legislative
8 Budget and Finance Committee to oversee an
9 independent audit of the deer management plan
10 of the Pennsylvania Game Commission.

11 With us today are representatives
12 from the Wildlife Management Institute, who
13 conducted the audit. Their report is before
14 each of the members.

15 Before turning the floor over to
16 them, and in particular Scot Williamson, I
17 would ask that each member here today identify
18 himself and the district that they represent,
19 starting on my far left.

20 REPRESENTATIVE GOODMAN: Good
21 morning, Mr. Chairman.

22 Representative Neal Goodman,
23 Schuylkill County, the 123rd.

24 REPRESENTATIVE MOUL: Good morning.
25 I am state Representative Dan Moul from the

1 91st District. That's Adams and Franklin
2 counties.

3 REPRESENTATIVE KULA: Good morning.
4 Representative Deberah Kula from Fayette and
5 Westmoreland counties, the 52nd District.

6 REPRESENTATIVE LEVDANSKY: David
7 Levdansky, the 39th District, Allegheny and
8 Washington counties.

9 CHAIRMAN STABACK: Ed Staback,
10 Lackawanna and southern Wayne counties.

11 REPRESENTATIVE MILLER: Ron Miller,
12 York County.

13 REPRESENTATIVE HORNAMAN: John
14 Hornaman, Erie County, 3rd District.

15 REPRESENTATIVE COSTA: Dom Costa,
16 Allegheny County, 21st District.

17 REPRESENTATIVE ROCK: Todd Rock,
18 90th District, Franklin County.

19 REPRESENTATIVE READSHAW: Harry
20 Readshaw, 36th District, Allegheny County.

21 REPRESENTATIVE HALUSKA: Gary
22 Haluska from Cambria County, the 73rd
23 Legislative District.

24 REPRESENTATIVE KELLER: Mark
25 Keller, 86th District, which is Perry and

1 Franklin counties.

2 REPRESENTATIVE SONNEY: Curt
3 Sonney, the 4th District, Erie County.

4 REPRESENTATIVE PYLE: Jeff Pyle,
5 60th Legislative District, Armstrong and
6 Indiana counties.

7 REPRESENTATIVE CUTLER: Good
8 morning. Bryan Cutler, 100th District,
9 southern Lancaster County.

10 REPRESENTATIVE GILLESPIE: Good
11 morning. Keith Gillespie, 47th District, the
12 eastern part of York County.

13 CHAIRMAN STABACK: Representative
14 Levdansky is with us this morning. David has
15 asked for a brief time period in which to
16 offer some comments regarding the audit
17 itself. I have agreed to allow him one minute
18 to make those comments.

19 David, you are up.

20 CHAIRMAN LEVDANSKY: This is going
21 to be quick. I just want to thank the
22 Chairman for the opportunity just to say a
23 couple of words.

24 I just want to put what we are
25 going to hear today and what we are going to

1 experience in a little bit of perspective.

2 I had introduced the resolution
3 actually way more than a couple of years ago,
4 and we had a lot of input from a lot of people
5 relative to trying to put this audit together.

6 It took a lot longer and was a
7 little more challenging, just in terms of
8 getting a resolution drafted and in place.
9 And it took a little while longer, even, to
10 get the appropriate consultants to do the
11 audit.

12 My hope going forward, from today
13 and from the audit that was released a few
14 weeks ago, is that we will have, in this
15 state, a more constructive dialogue about the
16 choices that we face regarding managing our
17 state's finest wildlife resource, the
18 white-tailed deer.

19 For long, for too many years, many
20 of us have watched and some even participated
21 in the deer wars, which from my perspective
22 has not always been a very constructive
23 approach towards resolving the issue of how we
24 want to manage white-tailed deer in the state.

25 My hope going forward is that this

1 audit does in fact provide all of us,
2 sportsmen and the public, with enough data and
3 enough understanding about how the Game
4 Commission has been managing the deer, and
5 that it will also constructively point the
6 direction -- a new direction as to what we
7 could do to the extent that we want to change
8 deer management in Pennsylvania.

9 The study, in my judgment, having
10 reviewed it and read it, doesn't necessarily
11 -- you know, does not come down -- This is not
12 intended, this study was not intended to
13 either absolve the Game Commission, or to give
14 them a stamp of approval or not.

15 I think it's a very objective and
16 fair assessment on how the Game Commission
17 manages the white-tailed deer. And hopefully
18 going forward, it will give the public and the
19 sportsmen the kind of information that we need
20 to evaluate the Game Commission's program so
21 that we can make constructive suggestions and
22 recommendations going into the future.

23 I appreciate that opportunity, Mr.
24 Chairman. I may have gone over 60 seconds a
25 little bit, but hopefully not much. Thanks.

1 CHAIRMAN STABACK: You did very
2 well. You did very well this morning.

3 The committee has been joined by
4 two additional members, in the likes of
5 Representatives Peifer and Everett, sitting on
6 my left.

7 With that, Mr. Williamson, you can
8 go ahead and begin your testimony whenever you
9 are ready.

10 MR. WILLIAMSON: I will. Thank
11 you, Mr. Chairman.

12 CHAIRMAN STABACK: Excuse me.
13 Please introduce the folks who are with you as
14 well.

15 MR. WILLIAMSON: I will. I would
16 like to thank you for the opportunity to
17 present the highlights of the Wildlife
18 Management Institute's evaluation of the
19 Pennsylvania Game Commission's deer management
20 program.

21 I am Scot Williamson, Vice
22 President of the Wildlife Management
23 Institute. Founded in 1911, the Wildlife
24 Management Institute is a private, nonprofit,
25 scientific and educational organization

1 dedicated to the conservation, enhancement and
2 professional management of North America's
3 wildlife and national resources.

4 WMI employees consist of wildlife
5 professionals, who have decades of experience
6 working for state and/or federal fishing
7 wildlife agencies.

8 We provide advice on the use of
9 science for wildlife management, conduct
10 agency program reviews, develop wildlife
11 policy, administer the largest wildlife
12 conservation conference in the country,
13 coordinate wildlife projects with state and
14 federal partners, and provide other services
15 to our profession and our partners.

16 Throughout the history of WMI, we
17 have conducted more than 70 program reviews
18 and evaluations for state and federal natural
19 resource agencies.

20 In 2009, the Legislative Budget and
21 Finance Committee contracted with WMI to
22 conduct an evaluation of the Pennsylvania Game
23 Commission's deer management program. WMI
24 assembled a team of independent scientists to
25 assist us in this evaluation.

1 Today, I am accompanied by two
2 members of that team: Pat Ruble, WMI's
3 Midwest Field Representative and former
4 biologist and administrator for the Ohio
5 Division of Wildlife; and Doctor Bill Healy of
6 West Virginia, retired U.S. Forest Service
7 biologist and researcher.

8 The five-person WMI review team had
9 more than a hundred thirty years of experience
10 in wildlife biology and agency administration.
11 WMI was asked to review the scientific basis
12 of the PGC's deer management program,
13 including the scientific foundation of deer
14 management goals, deer population and habitat
15 measurements, and citizen input procedures.

16 We employed various methodologies
17 throughout the course of our review and
18 evaluation process. We reviewed more than 90
19 documents from the PGC, from the DCNR, from
20 Penn State University, and the U.S. Forest
21 Service.

22 In addition, we consulted pertinent
23 peer-reviewed scientific literature. We
24 conducted interviews with natural resource
25 specialists, both within and outside of the

1 PGC. We also consulted with other state fish
2 and wildlife agencies to compare the PGC's
3 deer management program with their programs.

4 Finally, WMI conducted statistical
5 analyses and PGC data sets to test
6 assumptions, test model robustness, make
7 predictions, and evaluate decision-making
8 processes.

9 Our findings and conclusions are as
10 follows:

11 First. The PGC deer management
12 goals were based on forest health, deer
13 health, and citizen desires. These goals were
14 developed in recognition of the PGC's
15 constitutional mandate to manage wildlife as
16 "common property of all the people" and to
17 "conserve and maintain them for the benefit of
18 all the people." The PGC did not appear to
19 treat any economic interest or stakeholder
20 group differently than another.

21 [Second]. Between 2000 and 2005,
22 the PGC managed the state's deer population to
23 reduce deer population levels. The primary
24 management tool was antlerless permit
25 allocations. Based on estimates from the PGC,

1 WMI concluded that the statewide deer
2 population was reduced by approximately 25
3 percent between 2002 and 2007. In general,
4 since 2005, the PGC has attempted to stabilize
5 the deer population at this lower level.

6 [Third]. Since 2006, the PGC
7 adopted a widely distributed and accepted deer
8 population model, the sex-age-kill, or SAK
9 model, to monitor the trend in deer population
10 levels for each of the 22 wildlife management
11 units.

12 Based on our analyses, WMI believes
13 that the SAK model is a scientifically sound
14 and credible model to monitor deer population
15 trends. The PGC has conducted and intends to
16 continue field research projects to
17 continually improve the accuracy and precision
18 of the model's parameters and outputs.

19 The utility of the SAK model is
20 dependent, in part, on annual deer harvest
21 estimates. The apparent decline in deer
22 harvest reporting rates is a concern to WMI
23 because lower reporting rates increase the
24 variability of harvest estimation.

25 However, WMI found a strong

1 correlation between the annual deer harvest
2 estimation and the PGC game take survey
3 results, lending a measure of confidence to
4 the current PGC harvest estimation
5 methodology.

6 [Fourth]. Current WMU boundaries
7 were developed to provide homogeneous
8 landscape management units and statistically
9 valid sample sizes for estimating deer
10 population parameters. The WMU sizes and
11 shapes were a necessary compromise between the
12 need to obtain adequate sample sizes and to
13 manage deer population levels.

14 The DMAP, Red Tag, and Urban Deer
15 Management programs provided management
16 flexibility to address localized issues within
17 a WMU and were a viable alternative to smaller
18 and more numerous WMUs. WMUs were not
19 designed, however, to regulate hunting
20 pressure.

21 Fifth. The PGC monitors
22 reproductive rate to assess herd health. WMI
23 does not believe the current practice of using
24 the number of embryos per adult doe is a
25 reliable annual index to deer herd health.

1 This metric suffered from poor sample sizes
2 and a lack of sensitivity.

3 Sixth. The PGC monitors the extent
4 of regeneration to assess forest health.
5 Pennsylvania's forests are challenged by a
6 number of environmental and social factors.
7 However, the impact of deer abundance was a
8 major factor in forest regeneration failure.
9 The extent and success of forest regeneration
10 is a practical and ecologically sound
11 indicator of forest health but the current
12 sampling efforts should be increased to
13 monitor and guide deer management decisions.

14 Seventh. The Citizen Advisory
15 Committee, or CAC, process provided public
16 input into PGC decisions regarding forest
17 health, deer health, and human interactions;
18 but, in its current form, it did not
19 adequately incorporate all citizen desires.
20 Comparisons between the PGC deer management
21 program and those of seven other states
22 indicated that the PGC program was very
23 similar in design and execution with these
24 states.

25 Eighth. Although deer management is

1 a contentious issue in nearly every state,
2 the strained nature of the relationship
3 between the PGC and some hunters is
4 problematic and in the long term is damaging
5 to the public's understanding of the
6 importance of hunting and deer management.

7 And nine, and final, the scientific
8 foundation of the PGC deer management program
9 is sound but there is room for continuous
10 improvement especially in regard to ongoing
11 evaluation and assessment.

12 WMI recommends that the following
13 actions be taken:

14 First. Continue to improve the
15 accuracy of the SAK model by conducting field
16 research, increasing sample collection, and
17 verifying model parameters through statistical
18 analyses. Develop and prioritize policies and
19 procedures to increase deer harvest reporting.
20 The relatively new point-of-sale license
21 system may provide an effective means to
22 increase these reporting rates. Antlerless
23 deer harvested through the DMAP, Red Tag, and
24 Urban Deer Management programs should be
25 incorporated into the SAK model and permit

1 allocation procedures. PGC should publish its
2 estimates of population size and age and sex
3 structure, accompanied by associated levels of
4 variance, and an explanation of their
5 appropriate use.

6 Second. The PGC should seek an
7 alternative to embryos per adult doe as an
8 index of herd health or consider deleting this
9 metric and investing additional resources into
10 evaluating forest health. WMI suggests the
11 PGC consider evaluating fawn reproductive
12 rates or fawn-to-adult doe ratios in the
13 harvest.

14 Third. The PGC should increase
15 resources to measure the extent and success of
16 forest regeneration throughout the state and
17 within WMUs.

18 Fourth. The PGC should consider
19 investing in statistically valid public
20 information and survey methods designed at the
21 scale of the WMU.

22 Fifth. The PGC should enhance its
23 communication with stakeholders to explain the
24 deer management program and seek conflict
25 resolution with those stakeholders who

1 stimulate controversy surrounding the deer
2 management program.

3 The WMI thanks the committee for
4 the opportunity to conduct this review and
5 evaluation and for the opportunity to describe
6 our report.

7 I would also like to thank
8 Executive Director Phil Durkin, of the LBFC,
9 for his assistance during the process. As we
10 noted at the onset of this briefing, WMI
11 focused on the scientific foundation of the
12 PGC deer management program as charged. We
13 did not comment upon or recommend policy
14 decisions that are the purview of the PGC
15 and/or the General Assembly.

16 I thank you for your time, and we
17 will attempt to answer any of the questions
18 that the committee may have at this time, Mr.
19 Chairman.

20 CHAIRMAN STABACK: Thank you very
21 much for that report.

22 I want to start off by saying that
23 report that is in front of all of the members
24 is, obviously, the product of a lot of hard
25 work. Looking at the sources used and the new

1 data generated, WMI's work it presents
2 (phonetic) to the legislature, an independent
3 and thorough study needs to be recognized and
4 certainly commended. The report will be
5 looked at a long time after this meeting, and
6 its issues will be studied and I am sure
7 argued about many, many times for some time.

8 I want to ask you about a couple of
9 those issues and about the three-legged stool
10 that Executive Director Carl Roe described
11 during our annual reports, healthy forests,
12 healthy deer, and citizen concerns.

13 We will start with the healthy
14 forests. This report looks at the condition
15 of Pennsylvania's forests and its habitat for
16 wildlife, if you will. One of the basic
17 disagreements for forest health is how much
18 deer contribute to the poor -- to the
19 regeneration over forest health, is how much
20 deer contribute to poor conditions as well.

21 I want to read two quotes in your
22 report that address this point. On page four,
23 "While Pennsylvania forests are challenged by
24 a number of environmental and social factors,
25 the clear majority of evidence provided to WMI

1 indicated that abundance of deer was a major
2 cause of forest regeneration failure."

3 Now, over on page 42, "There was a
4 consensus among scientists and forest managers
5 that excessive deer browsing was the primary
6 factor limiting forest regeneration, and that
7 forest regeneration could be achieved where
8 deer numbers are regulated."

9 So on one hand, deer are a primary
10 cause or a primary factor of regeneration
11 failure. And on the other hand, they are a
12 primary factor. So my question is, are deer a
13 factor among many or the major cause above all
14 other that prohibit forest regeneration? And
15 can you discuss those other factors that hurt
16 regeneration, if you believe, indeed, there
17 are any?

18 MR. WILLIAMSON: To answer the
19 question, I would like to defer to Mr. Healy,
20 who has more expertise in that part of the
21 report.

22 MR. HEALY: I think there were
23 several parts to that, but I think deer are
24 the primary factor limiting regeneration on
25 most sites. And that's supported by numerous

1 studies, by exclosures. And in the report, it
2 does cite those things.

3 But are deer the only cause?
4 Absolutely not. Pennsylvania forests have a
5 whole host of problems.

6 Doctor Bill Sharp, and others, talk
7 about acid precipitation. And that is a
8 problem particularly on your sand stones and
9 shale soils, about 40 percent of the state.
10 It's not a problem on your limestone soils and
11 a good many of the other soils. So acid
12 precipitation is a factor, and that is
13 probably going to get worse.

14 Invasive species is a factor. The
15 tree of Hammond, the Autumn Olive, all of
16 these other things. Invasive species can be a
17 problem.

18 And some of the native species can
19 be a problem, particularly the ferns. Where
20 deer numbers are high, they can dominate the
21 site.

22 The loss of tree species. You have
23 lost some important foundation species in
24 Pennsylvania. The American Chestnut is one.
25 The American Chestnut supply a tremendous

1 amount of food.

2 One of the other big factors is
3 lack of fire. Over the last 5,000 years,
4 Native Americans burned these forests, and
5 they burned them to increase tree seed
6 production and fruit production and to make it
7 easier to hunt.

8 But with the exclusion of fire, we
9 began to have serious problems in
10 regenerating, particularly the oaks and
11 hickories. Not at all sites, they are doing
12 well on some of your drier sites. So they're
13 -- I don't know if I have hit them all. I am
14 old and have CRS.

15 But anyway, there is a host of
16 problems that do affect regeneration in there.
17 But in scientific studies and in practical
18 experience, generally we can cope with those
19 problems if we can keep deer numbers at a
20 reasonable level.

21 And just for example, gypsy moth.
22 That's one. Gypsy moth defoliation causes
23 mortality. If we can keep deer numbers at a
24 reasonable level, you can go in, harvest
25 trees, regenerate more trees, and get over

1 that problem.

2 If deer numbers are not maintained
3 at a reasonable level, you get no
4 regeneration, you can't cope with the problem,
5 and that's been the experience in Pennsylvania
6 and in the surrounding states that face the
7 same kind of acid precipitation, invasive
8 species, loss of native species problems.

9 We can cope with those problems if
10 we can cope with deer. And that, I hope, is
11 an answer.

12 CHAIRMAN STABACK: Well, I am
13 satisfied in knowing that deer, at least in my
14 view now, are not the major causes of forest
15 failure -- regeneration failure. That is what
16 you are telling me, they are not the major
17 cause. There are other primary factors at
18 work here, besides the deer, that are causing
19 regeneration failure.

20 MR. HEALY: There are other
21 underlying factors that are serious, but in
22 general the immediate factor, the immediate
23 cause of the regeneration failure, is
24 excessive deer browsing.

25 CHAIRMAN STABACK: But not the

1 major cause, as has been depicted in the
2 report, not the major cause.

3 MR. HEALY: I guess I have to beg
4 to differ with that.

5 CHAIRMAN STABACK: You beg to
6 differ with that?

7 MR. HEALY: Yeah.

8 CHAIRMAN STABACK: I am using your
9 words, the major cause versus a primary
10 factor.

11 What I am saying is that deer and
12 the regeneration failure and maybe the
13 overabundance of deer in certain areas, along
14 with other factors --

15 MR. HEALY: Yes. Oh, yeah.

16 CHAIRMAN STABACK: -- could cause
17 that.

18 MR. HEALY: I agree with that.

19 CHAIRMAN STABACK: But I don't deem
20 the deer as the major cause, there are other
21 underlying factors that contribute to the
22 regeneration failure as well.

23 MR. HEALY: Yeah. Yes, I would
24 agree with that. And I -- But I --

25 CHAIRMAN STABACK: And I think

1 that's the big point that has to be made.

2 MR. HEALY: Yeah.

3 CHAIRMAN STABACK: You can't just
4 point the finger at the white-tailed deer and
5 say that they are the cause. They are not
6 just the cause.

7 MR. HEALY: Okay, I'll agree with
8 that.

9 CHAIRMAN STABACK: Okay.

10 MR. HEALY: But to address the
11 other factors, I mean everything is connected
12 to everything else. You can't address the
13 other factors without addressing deer.

14 CHAIRMAN STABACK: See, up to now,
15 the other factors were never enumerated, no
16 one would talk about other factors. It's
17 always been the deer are the culprit, they
18 cause all the problems. And today we are
19 finding out that is not necessarily true,
20 there are other factors in play here as well.

21 MR. HEALY: Yes.

22 CHAIRMAN STABACK: Okay.

23 Okay. Now, to go further. On page
24 41, second paragraph, includes this sentence,
25 "The number of WMUs rated as good habitat has

1 declined since 2005, while the number rated as
2 poor has increased." So, in 2005, less deer
3 were in the woods than the years before. And
4 I think the report, as you said, is down to
5 about 25 percent, is what the decline was
6 between 2000 and 2005. That's about right.

7 If there are less deer in the
8 woods, where habitat is actually getting
9 worse, doesn't that fact seem to suggest that
10 other factors are coming into play again, as
11 we just discussed?

12 MR. WILLIAMSON: Sir, if I could?
13 We had a conference call last week with the
14 Game Commission. Apparently their -- Since we
15 received the data for the report that is
16 listed here, in the report there has been
17 updated data from the Forest Service. If I
18 could, for the record, just describe what the
19 trend is in regeneration success?

20 For the first three years,
21 basically five percent to approximately 15
22 percent were poor. That has declined in the
23 last two years. The number -- Or the
24 percentage of units that are ranked as good
25 has always been one or two. So there has been

1 really very little trend in the number or the
2 percentage of good units. There was an
3 increasing trend in the number of poor units,
4 but that has decreased in the last two
5 measuring periods.

6 If you would like, I could share
7 that graph with you?

8 CHAIRMAN STABACK: Okay.

9 MR. WILLIAMSON: But to get to your
10 point, and I think it's a very important
11 point, the systems that we are looking at in
12 Pennsylvania today, the forest systems that we
13 are looking at, are a product of history and
14 are not going to change over night.

15 So if there have been a reduction
16 in deer numbers for five years, seven years,
17 we are not prepared to say that there is going
18 to be a short-term turnaround in forest
19 health, because of some of the other issues
20 that Doctor Healy has mentioned, the recovery
21 of some of these forest systems. For example,
22 if they are dominated by a mat of hayscented
23 fern, the native hardwoods of Pennsylvania are
24 going to take some time to break through that
25 competitive disadvantage.

1 So it is true that there has been a
2 reduction in deer across the Commonwealth and,
3 as we showed in our report, there is not a
4 direct correlation with improving habitat in
5 those units. It is our belief that if you
6 give the system enough time to recover, that
7 you will see forest health indices improve as
8 you stabilize and maintain these deer
9 densities. But we are not able, today, to say
10 that that has occurred in all units in a
11 consistent way.

12 CHAIRMAN STABACK: Of course. And
13 you are certainly not in a position to
14 estimate, for us, how long it's going to take
15 for regeneration to occur.

16 MR. WILLIAMSON: We can cite
17 examples from other places. I think we could
18 cite some examples from within Pennsylvania,
19 where talking to the DCNR, they are looking at
20 the success of their oak regeneration from the
21 '70s and the late '90s, and now -- and they
22 are seeing what I would consider to be
23 substantial improvement.

24 But there was so much individual
25 variability between these units. That the

1 State of Pennsylvania is a large state, there
2 is a lot of variation in ecology and habitat,
3 and to make a blanket statement that you are
4 going to need X number of years to see this
5 recovery would simply be false.

6 CHAIRMAN STABACK: Okay. Thank
7 you.

8 Moving on. We talked for a little
9 bit about healthy deer, the -- How do I want
10 to start this? The data collected from
11 counting embryos on road kill deer is where we
12 are looking at. The primary use of this data
13 was to determine herd health throughout the
14 state for quite a long time.

15 From the chart on page 55, it
16 appears that Pennsylvania is the only state,
17 among those questions, that rely on this sort
18 of data to determine herd health. Herd
19 health, the second leg of that three-legged
20 stool that we referred to, is the fundamental
21 part of the Game Commission's plan, and the
22 accuracy of the plan used is widely important.

23 Now, on page 61, the report seems
24 to say that embryo counts do not give reliable
25 information. And again, on page 61, you

1 mentioned that sampling inconsistencies in
2 collecting road kill deer threaten the data.
3 Again, on page 61, you go further and suggest
4 that the Game Commission scrapped this method
5 of collecting data and even perhaps stop using
6 deer herd health as one of their measurable
7 goals.

8 Now, for those who criticize the
9 science behind deer management, doesn't this
10 problem with data support their argument? For
11 those people, there is a fundamental flaw
12 built into all of the formulas and decisions
13 that use this unreliable information,
14 unreliable data, if you will.

15 How do you respond to those who
16 ask, how can the scientific foundation be
17 sound when there are such serious problems
18 with the data?

19 MR. WILLIAMSON: If I could? There
20 are a number of questions in there that I
21 would like to try and answer.

22 Most of the jurisdictions that I am
23 aware of, almost, in the range of white-tailed
24 deer, have at one time or another looked at
25 reproductive rates and looked at the health of

1 the herd that way.

2 Pennsylvania, in my knowledge, and
3 I think this is a true statement, is the only
4 jurisdiction in the country that is actually
5 using reproductive rate as a management goal,
6 as not just a snapshot of the deer population
7 but they are using it as a management goal.

8 The science behind the logic of
9 that, the philosophy of that, the theory of
10 that, is sound. If there are overabundant
11 deer, whether they be deer or moose or elk or
12 red deer, the science shows that one of the
13 things that can happen if you have
14 overabundant deer and competition for
15 resources is that reproductive rate of adults
16 declines. So when the Game Commission
17 established the number of embryos per adult
18 doe, it was based in scientific foundation and
19 good science.

20 The thing that we found is there is
21 a dynamic here between having a indice that
22 you can measure with the level of precision to
23 detect a change. And even though the number
24 of embryos per adult doe is scientifically
25 sound, we didn't find that it was sensitive

1 enough to, what we think, to be some of the
2 changes that may occur in a deer population.
3 We think there are other measures that may be
4 more sensitive.

5 The second thing we found is that
6 with this kind of blunt sensitivity, it's hard
7 to get an adequate sample to get to the level
8 of precision that we in think you need to
9 detect change. I mean the theory is: as deer
10 numbers go up, impact to the habitat
11 increases, reproductive rate decreases. So
12 you need to understand where on the continuum
13 you are at when you are looking at
14 reproductive rate.

15 So I want to be clear about this.
16 We are not saying that deer health is not an
17 improper goal. We are saying that there may
18 be some other metrics to deer health that
19 would be more sensitive and there needs to be
20 adequate resources to sample those metrics so
21 that you have some certainty in the numbers
22 that you are looking at.

23 CHAIRMAN STABACK: All right. So
24 have you just told me that the Game Commission
25 then should continue collecting embryos and

1 using those in their decision-making process?

2 MR. WILLIAMSON: No, our
3 recommendation was to -- We suggested two
4 other metrics that they look at. One we know
5 is going to be a problem. Instead of looking
6 at adult reproductive rate, only look at fawn
7 reproductive rate. I mean those -- When
8 things get tough, fawns are the first not to
9 reproduce. So we think that is a more
10 sensitive index to deer herd health, the
11 problem is sample size.

12 The second metric that we suggested
13 was looking at the ratio of fawns to adult
14 does taken from the fall harvest. Obviously,
15 if your reproduction in the spring goes down,
16 the number of those fawns that survive till --
17 or that show up in the fall is going to be
18 down. So we think simply by looking at the
19 ratio of deer that they age, at check
20 stations, that that may be a metric that
21 provides as much insight into deer herd health
22 as any other metric.

23 CHAIRMAN STABACK: Okay. So they
24 shouldn't scrap the plan then?

25 MR. WILLIAMSON: They -- We

1 recommend that they consider other metrics to
2 deer herd health.

3 The second part of our
4 recommendation is: after that evaluation is
5 done, if they don't think they can get an
6 adequate window of deer herd health, that you
7 put those resources that you would have
8 committed to measuring deer herd health into
9 measuring forest health. Because that's the
10 driver for all of this, is the quality and the
11 quantity of habitat.

12 So we say, don't continue adult
13 does. Here's a couple other things to look
14 at. But if at the result of your evaluation
15 is that those may be weak indices, put all of
16 your eggs into the forest health basket.

17 CHAIRMAN STABACK: Okay. I think.

18 MR. WILLIAMSON: Well, it's a
19 stepwise process that I think we're asking the
20 Commission to consider.

21 CHAIRMAN STABACK: All right.

22 Okay. Let's move on. I have one
23 or two more that I would like to talk about
24 and then we will let it up to the rest of the
25 panel.

1 In your plan -- Or in your audit,
2 you have criticized the report card data that
3 the Commission receives from outside. Now,
4 other data that is criticized includes the
5 deer harvest report card system. The current
6 process, you call it inadequate --
7 inadequately calculated. On page number 27,
8 the problem with the data described as
9 critical.

10 Since the data, no matter how bad
11 or inaccurate, is used in the formula for how
12 many deer were taken, doesn't it affect how
13 allocations are set on populations and trends?

14 MR. WILLIAMSON: Well, we go, I
15 think, to great length to suggest in the
16 report that the commission consider either
17 incentives or some form of disincentives so
18 that reporting rate increases.

19 We understand the way that they are
20 estimating harvest right now is a
21 scientifically sound method. But common sense
22 would say if you are looking at 80 percent and
23 you are estimating 20 percent, there is less
24 room for error than if you're looking at 40
25 percent and estimating 60 percent.

1 We don't have proof that there are
2 hidden biases in the deer that are not being
3 checked or that are not coming to meat
4 lockers, but we would be much more confident
5 in the Game Commission's estimation of harvest
6 if that reporting rate was higher.

7 And it's -- It isn't anything that
8 we can show you, black and white, that this is
9 the bias that we identified, this is the
10 problem with the data. The data are precise.
11 They are collected consistently. It's a
12 scientifically valid method. But you are
13 looking at a hundred and thirty years of
14 experience and that experience makes the team
15 suggest we would really be much more
16 comfortable if the reporting rate was higher.

17 CHAIRMAN STABACK: All right. And
18 the only way that I can see that occurring
19 would be to mandate, in some way, that
20 accurate reporting take place.

21 MR. WILLIAMSON: It's already
22 mandatory.

23 CHAIRMAN STABACK: But it's not
24 being enforced, obviously, if only a certain,
25 small percentage --

1 MR. WILLIAMSON: Correct.

2 CHAIRMAN STABACK: -- is coming
3 through.

4 MR. WILLIAMSON: And this is one of
5 those places where you need to be cautious
6 about the steps ahead. You can provide a very
7 strong, a regulatory pathway towards
8 increasing your reporting rate. And we have
9 worked with many states that tie future
10 license sales into the generation of a report
11 the year before. So you can go to that
12 extreme.

13 You can go to the other extreme --
14 I don't know extreme, but the other side and
15 provide some type of an incentive. You can
16 make it easier for a sportsman to get a
17 license. You can enter their name into a
18 lottery and draw a muzzle loader, or five per
19 year, and give to somebody who turned in a
20 report card. There is all kinds of different
21 ways to get reporting rate higher.

22 What we caution against is you
23 don't want to install a system that may end up
24 providing a disincentive for a youngster or a
25 youth or an adult to continue hunting. I mean

1 it's just you need to be very careful that you
2 are not creating a barrier to recruitment and
3 retention.

4 So, as biologists, we want to have
5 a higher reporting rate. As hunters and as
6 conservationists, we also want to make sure
7 that we maximize the opportunities for youth
8 to come into hunting and that we maximize the
9 retention of our current hunters. So that
10 kind of tension is where, you know, is where
11 the commission, with advice from throughout,
12 can come up with the way that meets those two
13 dynamics.

14 CHAIRMAN STABACK: Okay.

15 MR. WILLIAMSON: We are confident
16 in that.

17 CHAIRMAN STABACK: And there is no
18 question, in your mind, the reporting program
19 that we now work with, within the Game
20 Commission, is inaccurate, it is not working
21 the way it should, and it needs to be
22 improved; would you agree with that?

23 MR. WILLIAMSON: We would like to
24 see harvest rate increase. We cannot stand
25 here today and provide you testimony that the

1 system is inadequate, but we can tell you,
2 based our experience, that we would feel much
3 more comfortable if the reporting rate was
4 increased and we think the commission would as
5 well.

6 CHAIRMAN STABACK: Well, then, if
7 you're not satisfied with the reporting rate
8 the way it is, then what's wrong with simply
9 saying it's inadequate?

10 MR. WILLIAMSON: What we don't want
11 to cast aspersions on is the validity of the
12 statistics coming out of that calculation,
13 because we look at the way that they are
14 estimating harvest and we find it credible
15 from a scientific perspective. It's an
16 experienced-based recommendation that -- It's
17 kind of a common sense recommendation that the
18 increased reporting rate, because it makes
19 sense, that that's going to decrease the
20 variability.

21 But we can't -- I mean I couldn't
22 do justice to my peers and say that there is a
23 problem with variability right now that we
24 have identified, because we haven't. But
25 based on our experience, we don't know whether

1 there are hidden sources of variability that
2 may be operating out there, and we did not
3 discover what those are.

4 CHAIRMAN STABACK: Okay.

5 Okay. Let's move on. My last
6 question, then I am going to call on Chairman
7 Miller.

8 In those areas where deer numbers
9 have been driven down considerably from their
10 original levels and regeneration has yet to
11 happen, how do managers, land managers,
12 biologists know when enough deer have been
13 killed in areas like that?

14 By tying regeneration and deer
15 numbers so closely together, isn't there a
16 risk that you could actually decimate a herd,
17 while waiting for seedlings to sprout in an
18 area, perhaps, where you have very poor soil
19 conditions and regeneration really is never
20 going to occur, no matter what you do with the
21 deer herd in that area?

22 How do you know when to stop
23 shooting them?

24 MR. WILLIAMSON: Well, I think you
25 use your experience, as the commission has

1 exhibited since 2005, as we show that deer
2 populations have decreased, as the commission
3 evaluates.

4 The forest health statistics have
5 not shown a rebounding recovery, but the Game
6 Commission has stabilized herds at that point,
7 beginning in 2005. I think they are waiting,
8 like probably every sportsman in the
9 Commonwealth is waiting, to see the recovery,
10 of when the recovery will occur with forests.

11 I think at the same time, and I can
12 speak with some certainty on this, that they
13 are constantly looking for other measures of
14 forest health that will improve their
15 understanding of this connection between deer
16 and the success of regeneration.

17 I mean it's not fair to base your
18 index on places that are dominated, for
19 example, by hayscented fern. I mean that may
20 be, you know, years until those recover.

21 And so, the commission, I believe,
22 is really looking to sort through and assess
23 the data in a way that they can be comfortable
24 that if regeneration success is not happening
25 that they can point to whether or not that is

1 deer caused. And if it is deer caused, then
2 they will take the appropriate actions through
3 their antlerless allocations. If it is not
4 deer caused, then they will not take those
5 actions.

6 CHAIRMAN STABACK: Okay.

7 Representative Miller.

8 REPRESENTATIVE MILLER: Thank you,
9 Mr. Chairman.

10 I guess I would just have a couple
11 questions to clarify some of the answers to
12 Chairman Staback.

13 When we are talking about the
14 health of our forests -- And you listed a
15 bunch of stressors. You listed the acid
16 precipitation. You talked about invasive
17 species, lack of fire. One thing you didn't
18 mention was land development and the movement
19 that way. But as we look at those, is this a
20 little bit like human health issues, where the
21 average person gets a case of the flu and,
22 yeah, it's miserable but we recover from it?

23 But if you are stressed with a
24 forest, whether it's because of acid
25 precipitation or other factors, that when the

1 deer herd then is the easiest managed part of
2 that; is that what I am hearing you say?

3 Because the acid precipitation is a
4 little harder to address than the invasive
5 species, it is a little harder to address, so
6 that we are looking that if it was a perfectly
7 healthy forest, of course it could support a
8 much larger herd, but because of the stresses
9 we need to reduce the deer even more, which is
10 causing this frustration level, and it seems
11 to be a vicious cycle; is that what I am
12 hearing?

13 MR. HEALY: Well, I am not sure
14 that deer are the easiest part to manage.
15 They are sure a part of that management. And
16 the longer you have had deer problems, the
17 longer it takes to correct those.

18 In general, our experiences have
19 been with the invasive species and gypsy moth
20 and forest pests and stuff, but we can manage
21 for those if we can manage deer at the same
22 time. So it's sort of not an either/or thing.

23 And, yeah, if there were none of
24 these other problems, the forest would have
25 more regeneration and we could have more deer.

1 But I think the really difficult part is, of a
2 landowner and a deer hunter, is when you have
3 poor habitat and not many deer, and that is a
4 tough situation to get out of.

5 It's unpleasant for the hunter
6 because there aren't many deer, it's hard to
7 find one, it's hard to kill one. And yet, if
8 you don't keep the hunting pressure on the
9 population, you know, the deer that you save
10 in November die in January. There is no food
11 out there for them to eat anyway, so.

12 And I think some areas, in
13 Pennsylvania, are in that situation, and it's
14 a tough, tough situation to get out of, and
15 all of those factors contribute to it. But
16 somehow you have to get more plants growing
17 than the deer eat, and do that over a period
18 of years. You have got to get the habitat
19 improving before the deer numbers can come up.

20 And that that is a very frustrating
21 situation for a landowner, a deer hunter, or
22 on the Pennsylvania Game Commission. And I --
23 If you have got a good way out of that, you
24 will win the Nobel deer prize.

25 REPRESENTATIVE MILLER: Understood,

1 understood.

2 Mr. Chairman, with that, I am going
3 to pass it on to other members of the
4 committee, who I am sure have questions.

5 CHAIRMAN STABACK: The committee
6 has been joined by additional members, in the
7 likes of Representatives Krieger, Hanna,
8 McGeehan and Gergely.

9 Representative Goodman.

10 REPRESENTATIVE GOODMAN: Thank you,
11 Mr. Chairman.

12 Well, both chairmen have done an
13 excellent job in asking questions. Many of
14 the questions that I had picked out have
15 already been asked and I don't want to repeat
16 them all.

17 But I have to say that I am a
18 little bit confused about how it can be
19 credible scientifically yet unsuccessful in
20 its results when we are talking about
21 reporting. And I find that -- it -- On the
22 one hand, it seems as though the audit is
23 saying it was scientifically credible the way
24 the Pennsylvania Game Commission is counting
25 the deer number, but yet unsuccessful in its

1 results.

2 And I will just leave it at that
3 because I think the chairmen covered the point
4 of how the Pennsylvania Game Commission
5 estimates its deer herd.

6 Two things I would like to just
7 point out with regard to clarity is that --
8 It's in the second part. It said -- Number
9 two, actually. It said, between 2000 and
10 2005, the Pennsylvania Game Commission managed
11 the state's deer population to reduce deer
12 population levels. The primary management
13 tool was antlerless deer permit allocations.
14 Based on estimates from the Pennsylvania Game
15 Commission, WMI concluded that the statewide
16 deer population was reduced by approximately
17 25 percent from 2002 to 2007.

18 So am I right to assume that this
19 audit is telling me that Pennsylvania has only
20 lost 25 percent of its deer since 2002 to
21 2007?

22 MR. WILLIAMSON: That's correct.

23 REPRESENTATIVE GOODMAN: I have a
24 lot of hunters in my legislative district that
25 would strongly disagree with that.

1 MR. WILLIAMSON: If I could address
2 the question, your first question about the
3 harvest rate, I don't believe I explained
4 myself sufficiently before.

5 The assumption when you are
6 checking meat lockers is that the deer that
7 you are checking, which is a sample,
8 represents the population as a whole. And I
9 don't want to get too statistically into the
10 weeds, but that's your sample and your --
11 that's how you are assessing what you think is
12 going to be true for the population as a
13 whole.

14 We didn't -- We find that that
15 sampling is adequate, but what we don't know
16 is if there is bias, is if that sample or if
17 that -- those deer that are present at meat
18 lockers, if they don't reflect the population,
19 if there is a bias there. If, you know,
20 four-and-a-half year old, trophy, 12 points
21 don't get taken to meat lockers,
22 disproportionately, then that is a bias.

23 There has not been an assessment of
24 bias done. We did not do one. It has not
25 been done by the commission. So while their

1 sampling and their estimation is sound, we are
2 concerned about this lack of measurement of
3 bias.

4 REPRESENTATIVE GOODMAN: And my
5 second question is, and the report doesn't
6 necessarily address this, but over the years,
7 I have asked the Game Commission, on numerous
8 occasions, if they didn't find themselves in a
9 very difficult situation not of their own
10 making.

11 And I have espoused to the fact
12 that I think that they got themselves in a
13 situation where, starting back in 2000, they
14 dramatically increased the antlerless
15 allocations and with that came a new-found
16 birth and resource.

17 And since that time, as many of us
18 have asked them to reduce that number, it has
19 never been said. But I have also felt that
20 somewhere along the line a decision was being
21 made not necessarily for wildlife but on
22 simple finances. And I have been very careful
23 not to blame them directly for this because we
24 all know we are facing very difficult economic
25 times. And to simply ask for a reduction of

1 like 10,000 deer -- for antlerless deer
2 allocations in my wildlife management unit,
3 you have 10,000 times five is fifty grand. So
4 there is a significant financial impact to
5 wildlife decisions being based on antlerless
6 allocations. Are you following me?

7 MR. WILLIAMSON: Yes.

8 REPRESENTATIVE GOODMAN: The
9 report, did your audit find anything along
10 those lines, sir?

11 MR. WILLIAMSON: Well, what I can
12 relate is that beginning in 2002, for each of
13 the WMUs, we saw -- I mean we walked the same
14 path that the managers walk. We looked at the
15 same data with -- And this is all data driven.
16 But we looked at the same spreadsheets, the
17 same worksheets, the same variables, and we
18 made an assessment of whether or not their
19 action in response to those -- to that level
20 of data was correct and we found no instances
21 where, as you follow through the process of
22 decision-making, that there was any kind of
23 deviation for a financial gain. It was
24 strictly deer management. It was strictly
25 herd management.

1 REPRESENTATIVE GOODMAN: Thank you,
2 Mr. Chairman.

3 CHAIRMAN STABACK: Representative
4 Levdansky.

5 REPRESENTATIVE LEVDANSKY: Thank
6 you, Mr. Chairman.

7 Mr. Williamson, I just wanted to
8 just delve a little bit more into this whole
9 issue of a hidden source of variability in
10 terms of the recording rate for deer.

11 Just before I get to the question,
12 I want to make sure that I clearly understand
13 how the Game Commission goes about estimating
14 the deer kill.

15 So we have butcher shops across the
16 state. The Game Commission has their field
17 personnel go to both meat lockers and out in
18 the field and they get a list of 40,000 deer
19 that were killed. And then they look at the
20 sample space and they compare it to the report
21 cards that are sent in. And those figures
22 probably show that, you know, maybe 37.5
23 percent of the successful deer hunters in this
24 state actually report their deer. So then you
25 are you are able to extrapolate from that

1 reporting rate what the total deer kill was.

2 I mean that's pretty much how it works?

3 MR. WILLIAMSON: Yes, except
4 their -- That last step is actually done with
5 what's called a mark recapture estimation,
6 which allows them -- The method that you
7 describe, you would get a number. The method
8 that the Game Commission uses, gives a number
9 and a level of confidence about that number.
10 Other than that, the way you have described is
11 exactly correct.

12 REPRESENTATIVE LEVDANSKY: Okay.
13 Now, one of my questions is this.
14 Do they do it -- So we say there is a
15 statewide reporting rate of thirty-seven and a
16 half percent, that's statewide, but does the
17 way that the estimation model works enable us
18 to say -- You know, we have got a couple dozen
19 deer management -- wildlife management units,
20 does that reporting rate vary by management
21 unit?

22 MR. WILLIAMSON: Yes.

23 CHAIRMAN LEVDANSKY: Okay.

24 MR. WILLIAMSON: That statistic
25 would be generated for each of the WMUs.

1 REPRESENTATIVE LEVDANSKY: Okay.

2 So it's -- So, for example, I live in
3 Allegheny County. Guys from Allegheny County
4 kill deer all over the state. So the Game
5 Commission, when they come to the meat lockers
6 in Allegheny County, they actually record what
7 management unit each of those deer have been
8 killed at?

9 MR. WILLIAMSON: I believe it's
10 down to the township level.

11 REPRESENTATIVE LEVDANSKY: Down to
12 the township level.

13 MR. WILLIAMSON: So it's the unit,
14 the county and the actual -- if the --

15 REPRESENTATIVE LEVDANSKY: Okay.

16 MR. WILLIAMSON: -- if the hunter
17 reports it, the actual township.

18 REPRESENTATIVE LEVDANSKY: Okay.

19 Now, earlier, you talked about this
20 hidden source of variability. Let me make
21 some suggestion on what a hidden source of
22 variability could be, and this is just based
23 on my personal experience as a hunter and as
24 somebody that butchers my own deer.

25 I am abnormal compared to most

1 hunters in Harry Readshaw and Mark Gergely's
2 district in Allegheny County. Most of our
3 hunters in Allegheny County don't butcher
4 their own deer, they take them to the meat
5 lockers.

6 But I'll bet you, in Representative
7 Everett's district in Lycoming County, I'll
8 bet you that an overwhelming -- So I'll bet
9 you that an overwhelming majority of hunters
10 in urban and suburban areas take their deer
11 that they kill to butcher shops. I'll bet you
12 in a majority of communities in rural
13 Pennsylvania, they don't take them to butcher
14 shops, they butcher them at home. You never
15 -- So that deer that's butchered at home is --
16 never shows up in the estimation model that
17 the Game Commission uses, correct?

18 MR. WILLIAMSON: Correct.

19 MR. HEALY: Unless it's equal.

20 CHAIRMAN LEVDANSKY: There is a
21 huge hidden source of variability right there,
22 and I don't really understand how the Game
23 Commission can have a huge, high level of
24 confidence in their estimation model with the
25 existence of that very factor.

1 MR. WILLIAMSON: The assumption
2 that you would have to test in that scenario
3 is if you have a higher percentage of people
4 in Allegheny County that take their deer to a
5 locker and you have a low percentage of people
6 in, I believe, Lycoming County that take their
7 deer to a locker.

8 So in Allegheny County, it's a high
9 percentage, so you probably have a pretty
10 decent sample. In Lycoming County, with that
11 low percentage, you'd have to hope that the
12 deer brought in, the age structure and sex
13 structure of those deer that are brought in,
14 the SAK ratio, is in fact reflective of the
15 population. That's why we get concerned in
16 Lycoming County when reporting rate is low.

17 REPRESENTATIVE LEVDANSKY: So it
18 really is -- So -- I mean just to get to the
19 point, it really is important that we have a
20 high degree of confidence in our model that is
21 estimating what our deer kill is. I mean
22 other states have undertaken, as you have
23 mentioned, both incentives and disincentives,
24 it's a mixture of both.

25 And I think the report also shows

1 that Pennsylvania is unique amongst the states
2 in the survey from -- for not only in the
3 northeast, insofar as that while we have
4 mandated reporting. I mean it's a \$25 fine in
5 this state if you don't report your deer kill,
6 and we raised that from five to \$25 back in
7 1985. Because I remember, Ed and I were on
8 the Game and Fish Committee and I offered that
9 amendment.

10 But the penalty for failure to
11 report hasn't been changed in 24 years, and
12 the value of 25 bucks in 1985-1986 is
13 significantly more than what it is today.

14 I am just really concerned that
15 since so much of deer management in
16 Pennsylvania is predicated on this model, that
17 we need to undertake, I think, the Game
18 Commission needs to, I think, make a
19 significant effort to developing a better
20 model and getting better harvest reporting so
21 that we can in fact increase our confidence
22 level in terms of evaluating exactly how many
23 deer we kill, what age and sex ratios, and
24 what places.

25 So I appreciate, you know, what you

1 have laid out in the report, and I think the
2 onus is going to be on the Game Commission to
3 make some significant changes, to increase the
4 reporting rates of deer kills in Pennsylvania.

5 CHAIRMAN STABACK: Representative
6 Gergely.

7 REPRESENTATIVE GERGELY: Thank you,
8 Mr. Chairman.

9 What is the second--we were just
10 discussing--the second most amount of debt
11 that would involve deer, would be what in
12 Pennsylvania?

13 MR. WILLIAMSON: I am sorry, sir,
14 the question?

15 REPRESENTATIVE GERGELY: What's
16 the -- Outside of hunting, what -- Did you
17 conclude anything where there is another, a
18 significant amount of death that would occur
19 in the deer population outside of hunting that
20 would be a significant proportion of the total
21 population?

22 MR. WILLIAMSON: (No response.)

23 REPRESENTATIVE GERGELY: A
24 measurable amount of death that would occur to
25 deer outside of hunting, did you ever consider

1 that?

2 MR. WILLIAMSON: I believe that
3 would be road kill.

4 REPRESENTATIVE GERGELY: Right.

5 MR. WILLIAMSON: And I don't want
6 to quote, from memory, the number of road
7 kills, but at least that we know about it's
8 the next largest, identifiable, recoverable
9 source of dead deer.

10 REPRESENTATIVE GERGELY: Was it --
11 I am just trying to look at the review methods
12 that you have indicated, the 70 of them. None
13 of them were referencing road kills, though,
14 in statistics; is that correct?

15 MR. WILLIAMSON: Well, the
16 reproductive rate information is from road
17 kill.

18 REPRESENTATIVE GERGELY: If you
19 were to develop, statistically, along with all
20 of the other harvest reports, a road kill
21 report that would coincide with that, how
22 helpful would that be in terms of
23 understanding the deer population in this
24 state? Or does it occur in other states where
25 they do use that?

1 MR. WILLIAMSON: You mean you
2 use -- you use road kill as an index of the
3 population?

4 REPRESENTATIVE GERGELY: You use
5 road kill as a part of the formula to get that
6 index.

7 MR. WILLIAMSON: The -- There are
8 some jurisdictions that as long as you know
9 the number of miles driven in an average year
10 or an average month, can use road kill as an
11 index.

12 In the SAK model, if your question
13 is should that source of mortality be pooled
14 into the SAK model, it in fact is already
15 there indirectly because the SAK model is
16 looking at the progression of ages through the
17 population.

18 I mean you show up as a fawn, if
19 you die, you don't show up as a yearling. If
20 you show up as a yearling, that means you
21 didn't die as a fawn. So that all mortality,
22 whether it's hunting, predation, road kill,
23 accidents, drowning, all mortality is in fact
24 included and indexed as you look at those ages
25 in that SAK model. It's like an actuarial

1 table.

2 REPRESENTATIVE GERGELY: Okay. I
3 am going to have to read more on this.

4 But still, the report card lack of
5 reporting, the harvest report card, we would
6 still like to see an increase because we still
7 -- the variability is still -- you're --

8 Before in the testimony and the
9 questions that were asked by the Chairman, we
10 just don't turn in the report card, so we
11 don't know that, we can't always accurately
12 count that kill. I was only looking at that
13 as another means to get a better count, a
14 better understanding of the different areas.

15 I mean I-79, going to Erie from
16 Pittsburgh, has a significant amount of road
17 kill on the highway as opposed to maybe I-80
18 as you are going from Elk County to some other
19 place in the northeast, and is it reflective
20 of the deer ratio per square mile in those
21 areas?

22 MR. WILLIAMSON: I think, like all
23 indices, if you understood the biases
24 associated with that mortality, that it may
25 prove to be useful or it may prove not to be

1 useful.

2 If there is spring green up on I-80
3 a little bit early that draws deer out to the
4 roadside in a way that is not representative
5 of other years, you are going to see a huge
6 spike in dead deer but that may not mean that
7 there are more deer. So you would have to be
8 very careful about how you interpret that
9 index and any other index.

10 And I think that's our point,
11 understand the variability but also understand
12 where there are sources of bias that you need
13 to take into account.

14 REPRESENTATIVE GERGELY: Thank you,
15 Mr. Chairman.

16 CHAIRMAN STABACK: Representative
17 Pyle.

18 REPRESENTATIVE PYLE: Thank you,
19 Mr. Chairman.

20 I am going to have to lean here, we
21 are a little bit away from the microphone.

22 I appreciate the work that went
23 into this, Mr. Williamson, but a couple of
24 things come up. I am probably stating the
25 obvious, that we all want to encourage greater

1 reporting of deer kill.

2 We have heard talk of disincentives
3 through further penalization, which I am sure
4 will be a toll in the toll box, so to speak.
5 But something you said struck a cord with me,
6 and Mr. Chairman, if I may, the incentive end
7 of it. Pennsylvania is rich in wildlife. And
8 just as suggestion, and something I have
9 talked about with our legal staff here, is
10 let's address the incentive end of it.

11 The PAL [PA Automated License]
12 System, which we all fought hard to get in
13 place, has proven very successful, but how do
14 we use that to enhance our reporting methods?

15 And what I would like to suggest,
16 Mr. Chairman, is at the discretion of the Game
17 Commission, perhaps we could have the reports
18 increase by offering an incentive of maybe a
19 bear license or an elk license, or whatever,
20 for anybody who enters their kill figure into
21 our systems for our statistical analysis, as a
22 way to drive up that reporting. And I will be
23 talking with our legal counsel, later, in an
24 effort to maybe frame that as law.

25 A question I -- something that's

1 come to me here, Mr. Chairman, and please
2 accept this only as suggestion, but the
3 discussion right now seems to hinge around
4 forest health as a correlation to herd size
5 and thus hunting opportunities for a
6 sportsman. Mr. Chairman, I don't know if I am
7 speaking out of school, but perhaps we should
8 have a joint committee hearing of the
9 Environmental Resource and Energy Committee
10 and this committee to fully vent out this idea
11 of forest health.

12 You have opened my eyes to a lot of
13 issues here, and one of the things you brought
14 up that interests me is the idea that you put
15 forth of the Indians doing control burns in
16 the forest to increase forest health. The
17 question that comes at the end of that
18 sentence is, after these controlled burns,
19 what kind of timeframe would we be looking at
20 before that section of forest would regenerate
21 with wildlife?

22 MR. HEALY: I will --

23 REPRESENTATIVE PYLE: I know it's
24 not an exact number, but can you ballpark a
25 number?

1 MR. HEALY: Yeah. I don't have a
2 good answer for that. The burning that --
3 Single burns don't do anything for you, so
4 it's a process of burning at a fair -- light
5 burns at a fairly frequent interval that kept
6 the forest floor dryer. They killed a lot of
7 the vegetation that competes with the oaks and
8 hickories. They also killed oak seedlings but
9 at a lower rate. So over a period of years,
10 the vegetation built up.

11 Maybe a rough answer to that is
12 controlled burning and what they call
13 shelterwood cuts have been successful in
14 Pennsylvania and down through the southern
15 Appalachians.

16 And in order to get a new crop of
17 oak seedlings through, you are usually talking
18 about a cut, followed by a burn, maybe five to
19 seven years. So you are looking at a decade
20 to pool that, when you use that shelterwood
21 control of burning method, before you can say
22 it's a success.

23 At a forest-wide level, if you did
24 more control burning, I don't know. But
25 probably some of your Game Commission habitat

1 managers will tell you because they are on top
2 of the burning issue and using it aggressively
3 on the state game lands.

4 REPRESENTATIVE PYLE: Well, I
5 recall the calamitous fire that swept
6 Yellowstone, probably about 15, 20 years ago,
7 with everybody thoroughly concerned with the
8 damage that was occurring. But the rangers
9 and the foresters at the time said, don't make
10 a big deal of it. It will come back stronger.
11 And in fact it has. And Yellowstone now is
12 vibrant, they are introducing new species,
13 populations.

14 And, obviously, that wasn't a
15 control burn. I believe it was -- They
16 speculated a lightning strike touched that off
17 or a bad camper, for lack of better words.

18 But that's about my only questions
19 and comments.

20 Mr. Chairman, as a sidebar, you
21 asked the question, when do you stop shooting?
22 I am almost positively certain, when your
23 target is down. Thank you.

24 REPRESENTATIVE MILLER: He knew
25 that was coming.

1 REPRESENTATIVE PYLE: You knew it
2 was coming.

3 CHAIRMAN STABACK: Representative
4 Haluska.

5 REPRESENTATIVE HALUSKA: Thank you,
6 Mr. Chairman.

7 And adding a little bit to the
8 burn, obviously. On page 42, you talk about,
9 you know, the Native American's use of
10 wildfire to create habitat. And, fortunately,
11 last week, we were able to pass House Bill
12 262, the prescribed burning bill, which
13 obviously will help the Game Commission and
14 DCNR, private citizens, utilize that.

15 The one thing you did talk about in
16 your testimony was looking to see, from the
17 spring to the fall, how many fawns that you
18 saw. But you really didn't talk on--a little
19 bit about it--the fawn mortality.

20 And I noticed, over the last two
21 decades, there has been a lot more predators
22 over what the -- The numbers of predators have
23 really increased in Pennsylvania, obviously
24 the coyotes, which most of the people that I
25 talked to that hunt and trap coyotes don't

1 really see them taking that many deer. Now,
2 maybe fawns, that's something that they do.
3 But they like to eat field mice, they like to
4 eat a lot of vegetation, other things.

5 Bobcats, I had the experience this
6 past winter here where an adult male bobcat
7 actually took down a full-sized deer, and that
8 was its kill, that was its food.

9 Bobcats are more prevalent.
10 Coyotes are more prevalent now, obviously.

11 You talk about the forests and the
12 regeneration. Have you ever walked through a
13 forest where 30 or 40 turkeys had just cleared
14 out? They take everything that is possibly
15 green that they can find off the forest floor
16 and eat it. And turkey populations have
17 expanded hugely in Pennsylvania.

18 Bear, obviously, are probably at
19 one of the highest points. And I think the
20 Game Commission, in their fawn mortality
21 study, have looked at bear as one of the
22 primary predators, which now we have bobcats,
23 we have coyotes, we have all of these
24 predators.

25 So it would be interesting to see a

1 little more emphasis on the fawn mortality,
2 and to see, you know, the numbers of fawns
3 that are dropped in the spring, and actually
4 how many of those fawns are actually making it
5 to the fall. Because I think that's part of
6 our problem in this whole equation, as far as
7 forest health and everything.

8 But as far as the deer themselves,
9 you know, how many of those fawns are making
10 it, you know, through their first few weeks
11 of, you know, survival, and get into those age
12 groups of six months old, you know, come
13 hunting season.

14 But that is just a couple of
15 comments that I had. Thank you.

16 MR. WILLIAMSON: And I appreciate
17 those comments.

18 If you would refer in our report to
19 page number 39, in the graph in the middle of
20 the page, where we actually look at
21 fawn-to-doe ratios for each of the WMUs,
22 that's an average from 1990 to 2008. The --
23 And it would be fairly simple to look at a
24 fawn-to-doe ratio -- or a fawn-to-adult doe
25 ratio and back-calculate, based on what we

1 know about reproductive rates, to calculate
2 the number of fawns between, you know, June 1
3 and the start of the deer season that are
4 probably gone.

5 But I think those indices right
6 there suggest that, one--and, you know, it's
7 important to know the trends--one, there are
8 big differences between units in fawn-to-doe,
9 suggesting that there are differences in
10 mortality and survival between units. Whether
11 that's predation, or malnutrition, or, you
12 know, some other source of mortality, you can
13 tell from those statistics. But because the
14 SAK model is set up the way it is, that the
15 Game Commission can actually respond to those
16 differences in survival and mortality of that
17 fawn age class.

18 REPRESENTATIVE HALUSKA: Well, you
19 would think it would be more predation than
20 food sources because, obviously, the deer will
21 move, you know, to the food. I mean they are
22 not going to stay somewhere where they are
23 going to starve to death. You know, they are
24 going to leave that area. They are going to
25 move out. So if the population of adults is

1 stable and the fawn population is falling off,
2 wouldn't you think that predation probably
3 would be one of the major causes?

4 MR. WILLIAMSON: There's -- No.
5 There's a lot in the literature to
6 suggest that an adult doe that's stressed
7 through a winter because she is malnourished,
8 or in a tougher winter might carry those two
9 fawns to birth, but because she's in such poor
10 shape, those two fawns are actually too weak
11 to nurse and there's a lot of -- There's
12 potentially a source of mortality. Because
13 the fawns are born, the reproductive rate is
14 still two, but they are dead within hours.

15 When we look at predation, I mean,
16 obviously, Black Bear predation and coyote
17 predation on fawns, the first, you know,
18 period of life is -- can be significant, and I
19 don't want to downplay that. Depending upon
20 the local conditions, it might be, you know,
21 the only source of mortality or a major source
22 of mortality, you go somewhere else and it may
23 not be.

24 But the -- I guess the take-home
25 measure is, whether or not it's happening or

1 not, you should be able to pick that up in
2 your data and change your deer seasons
3 accordingly, with what that kind of background
4 level of mortality is.

5 You are not going to always catch
6 every spike, but if you understand, kind of,
7 the running average in what your fawn survival
8 is, then you can be a better deer manager in
9 that unit.

10 REPRESENTATIVE HALUSKA: Thank you.

11 Thank you, Mr. Chairman.

12 CHAIRMAN STABACK: Representative
13 Krieger.

14 REPRESENTATIVE KRIEGER: Thank you,
15 Mr. Chairman.

16 Thank you, gentlemen, for being
17 here.

18 First a question. Can you identify
19 or when did we first notice the forest
20 regeneration problems?

21 MR. WILLIAMSON: In the '30s and
22 '40s. I mean if you look at the--and we put a
23 little bit into here--if you look at the
24 history of the Game Commission, in the mid
25 '50s, they were given control over antlerless

1 allocations--and I think my dates are
2 approximately right--because of their concern
3 over forest health.

4 MR. KRIEGER: And is that problem,
5 in your judgment, getting worse, getting
6 better?

7 MR. WILLIAMSON: We are encouraged
8 by some of the data presented to us, by the
9 DCNR, that their field foresters are finding,
10 particularly with oak, that the level of
11 regeneration now compared to the '90s,
12 compared to previous than that seems to be
13 better. We are expecting that FIA data, the
14 Forest Inventory and Analysis data, is going
15 to reflect that at some point in time, but we
16 are encouraged by what we were told by DCNR.

17 REPRESENTATIVE KRIEGER: My
18 observation is most hunters want -- obviously
19 they want more deer, but they also don't want
20 to do that at the price of damaging or
21 destroying our forests. I think, to some
22 degree, where the issues arise, I think is the
23 fact that many hunters observations don't seem
24 to fit the theory that you are presenting
25 today.

1 And I wonder if I can just, real
2 briefly, give you my observations in
3 Westmoreland, Fayette County. I grew up
4 there. I have been up there all of my life on
5 those ridges, and these are not anything
6 remarkable.

7 In fact the reason I mention this
8 is because thousands of hunters, I mean at
9 least in Westmoreland and Fayette County,
10 would relay this same thing to you. Back in
11 the '70s, I can remember it was rare to see a
12 deer in our woods. In fact I can remember, as
13 a kid coming back from small game hunting and
14 telling my dad and my uncle if I saw a deer
15 track, that was a big deal just to see a
16 track.

17 Obviously, the things improved over
18 the years since then. We had -- I don't know
19 that we ever had the deer numbers they have in
20 the northern counties. I can remember hunting
21 in Cameron County as a kid and seeing hundreds
22 of deer. We never saw that in the ridges of
23 Westmoreland and Fayette County, but we
24 certainly saw more deer there than we did in
25 the '70s.

1 Now there are days you go out on
2 those ridges and not only will you not see a
3 deer, you will not see a track. And
4 throughout this entire period, at least to the
5 layman's eye, the forests don't appear to have
6 changed. I wonder how you can square that
7 observation and the observation of thousands
8 of other hunters in that area of the state
9 with your theory.

10 MR. WILLIAMSON: The -- I guess we
11 don't offer our own experiences because we
12 believe that you need to allow the data to
13 speak. We know that the FIA data that's
14 collected by the forest service, which is done
15 on an annual basis and we feel is the best
16 type of data there is to assess the recovery
17 of the forest, is what we use to describe the
18 lack of recovery and it's what the Game
19 Commission is using to describe the lack of
20 recovery of Pennsylvania's forests. So we
21 don't find any reason to question that data.

22 We find that the model that
23 Pennsylvania uses to index deer populations,
24 we tested it every way we know how, we tried
25 to find its faults and we concluded at the end

1 that there were -- it's a very credible way to
2 index a deer population. So the model is
3 suggesting deer populations have decreased in
4 most units. I mean we're -- Let's be careful
5 that we don't lump statewide and have that
6 expression be for every unit.

7 If you look at our appendix, we
8 include a different graph for every unit. And
9 there are some units that the population is
10 down more than 25 percent and there's some
11 where the population has increased. So we
12 need to be -- I need for the record to say
13 that, you know, the way to look at this is at
14 the unit level.

15 But to answer your question, for
16 most of the units, the Game Commission
17 estimates there are fewer deer; the forest
18 service data does not show a recovery in the
19 forest; and we found that, whether you call it
20 the primary or the major, but the biggest
21 determinant of that forest regeneration
22 success is the number of deer.

23 So while I don't argue with your
24 observations and the observations of your
25 constituents, what we found was that the data

1 don't show yet that the forest is recovering
2 as these deer populations go down.

3 REPRESENTATIVE KRIEGER: Following
4 up, perhaps, a little bit on Chairman
5 Staback's earlier questions, I just wonder, if
6 we go back to the 1970s -- And you mentioned
7 the regeneration problems started in the '30s.
8 And at least in my area of the state, for much
9 of that time, we didn't have deer. I mean
10 very few of us, again very rare. And those
11 regeneration problems continued through that
12 time, and it sounds like they are continuing,
13 just suggests to me that deer aren't the
14 problem here.

15 If we had regeneration problems
16 with no deer and we have regeneration problems
17 with deer, doesn't that suggest that deer
18 aren't the primary factor or perhaps not even
19 that significant a factor in some parts of the
20 state?

21 MR. WILLIAMSON: Do you want to
22 take it?

23 MR. HEALY: Yeah. Just some
24 general comments about forest and habitat.
25 When most of Pennsylvania's forests

1 regenerated, there weren't many deer. It was
2 early in the last century.

3 But forest habitat is either, in
4 terms of a deer, is either in one or two
5 states: it's either getting better or it's
6 getting worse. I mean habitat constantly
7 changes.

8 But one of the things -- In answer
9 to your question, is the problem worse now
10 than it was then, I mean back in the '30s and
11 '40s what brought the problem to the attention
12 was dead deer in the spring. We were finding
13 lots a dead deer along the rivers.

14 But during -- up until fairly
15 recently, the deer density hasn't mattered
16 that much because the forest was getting older
17 and older. Now you have probably 60 percent
18 of the state forest that's up in that 80 to a
19 hundred and ten years old, so now it's --
20 people want to harvest that and want to
21 regenerate it.

22 So I don't know if the problem is
23 any better or worse, but it's a lot more
24 evident when you have mature forests, like you
25 do you over a good bit. I think the last

1 forest survey showed you probably -- 60
2 percent of your forestland is up in that stage
3 where it's ready to be cut and harvested.

4 So the problem is, I don't know if
5 it's better or worse, but it's really more
6 obvious because, landowners are going to make
7 a decision and if they don't have regeneration
8 on the ground, their options are pretty
9 limited.

10 You know, I don't know what your
11 ridges looked like in 1970, but certainly the
12 forest is 40 years older and -- but that's --
13 Well, one of the points I want to make from
14 that, is that, because habitat is constantly
15 changing, a lot of places in the state, all of
16 the hunting you did in the last century don't
17 make any difference. That's not what
18 determines what's there now, it's the habitat
19 that exists now that determines how many deer
20 can be there. So in some places, whether you
21 had hunted or not hunted, it wouldn't be much
22 difference.

23 But right now, you are at a stage
24 in the development of Pennsylvania's forests
25 where a lot of them are ready to be harvested,

1 a lot of them will be harvested in the next 10
2 to 20 years, and it's important to get
3 regeneration in those stands. So that
4 historical convergence has made the number of
5 deer really critical.

6 REPRESENTATIVE KRIEGER: Thank you.

7 One last question. Again, I will
8 start with an observation and then have my --
9 go to my question.

10 In my district and in some of the
11 districts in southwestern Pennsylvania, the
12 habitat within a few miles is very different.
13 For example, in my district, I can be in the
14 farm country and I saw 50 or 60 deer the first
15 day this year. Again, you can go 10 miles
16 from there, in the ridges, and you don't see
17 anything.

18 Has there been any discussion or
19 would you have any recommendation with regard
20 to the size of the management units? For
21 example, does it make sense to make those
22 management units smaller so that we can manage
23 the farm country, for example, in 2C or 2D,
24 different than we manage the ridge tops?

25 MR. WILLIAMSON: It does make

1 sense, and there is a constant drive to make
2 more units, to make a smaller unit, to
3 subdivide out something from another.

4 The problem is--and we think it's a
5 significant problem that we are spending a lot
6 of time today talking about--how certain are
7 we of the Game Commission's numbers, and one
8 of the most important things with the size of
9 the unit is it's large enough that you get an
10 adequate sample so that when Director Roe is
11 speaking about X number of deer or X number of
12 forest health plots that there is some
13 certainty behind that statistic.

14 So it's always fine to split a
15 unit, but you need to have adequate sampling
16 of--with the Game Commission's current
17 goals--of harvest, of deer health, of forest
18 health, and the citizen desires, in order to
19 make that brand new unit of one where you can
20 have some faith in the integrity of the
21 statistics that the Game Commission comes up
22 with to describe what's happening in that
23 unit.

24 REPRESENTATIVE KRIEGER: And to
25 make sure I understand, you are saying the

1 sample needs to be large enough to be
2 statistically significant?

3 MR. WILLIAMSON: Yes.

4 REPRESENTATIVE KRIEGER: Of course
5 the other side of that is, if you make the
6 unit big enough to get a big enough sample,
7 you're still at very diverse units. And while
8 that's a good average for that, just for
9 example, 2C or 2D, it may not necessarily be a
10 good average for a township that's along the
11 top of the ridge.

12 MR. WILLIAMSON: Agreed. I mean
13 the issue of -- And I will use, for example,
14 the ridge and valley province in Pennsylvania.
15 That -- I mean there is no more stark
16 difference between the valley bottoms and the
17 ridge tops and the issue of private land
18 versus public land, but the manager accepts
19 those differences as long as they can have a
20 set of data from the unit large enough to have
21 adequate sampling and small enough to have
22 capture the ecological differences between
23 units.

24 REPRESENTATIVE KRIEGER: Okay.

25 Thank you, Mr. Chairman.

1 Thank you.

2 CHAIRMAN STABACK: Earlier -- And
3 this is a takeoff on what Representative
4 Krieger started to ask you. In areas of the
5 state where the herd has been dramatically
6 reduced already and we are still not
7 witnessing healthy regeneration--you're not
8 saying this, but I can't help wondering if you
9 are not implying it in some way--that rather
10 than considering other underlying factors for
11 the regeneration not occurring the way it
12 should, right, that the Game Commission
13 consider continuing to kill off the deer in
14 those areas. Now, you haven't said that, but
15 in my view I think you are implying it in some
16 way. Tell me I am wrong.

17 MR. WILLIAMSON: Well, I would
18 never say you are wrong, Mr. Chairman.

19 CHAIRMAN STABACK: No.

20 MR. WILLIAMSON: I think what I see
21 the Game Commission doing is they are
22 stabilizing. They have taken deer populations
23 down to a level and they are holding it there.
24 And they are holding it there until they
25 determine, in their process, we can let this

1 deer herd increase, decrease, or we are going
2 to continue to stabilize.

3 I -- We don't see, as we look at
4 the management objectives that the Game
5 Commission has for the units, where they are
6 continuing to drive populations lower in a lot
7 of the units that have kind of been identified
8 as the problem units.

9 CHAIRMAN STABACK: But you don't
10 suggest anywhere in your testimony that they
11 should, perhaps, look into other underlying
12 factors, other than continuing to lower the
13 herd, where they run into these areas like we
14 are talking about, where the herd has already
15 been dramatically reduced and still you are
16 not witnessing any kind of regeneration.

17 At that point in time, it would
18 appear to me that they should be looking for
19 other factors as to why regeneration is not
20 occurring and not just look at a deer herd
21 that has already been lowered dramatically and
22 believing that the only way that they are
23 going to witness regeneration would be to
24 further reduce the number of deer in that area
25 and continue to kill them off.

1 MR. HEALY: The foresters, both
2 Game Commission and private and state and
3 federal foresters, do take all of those other
4 factors into consideration when you are
5 looking at a piece of forest property to
6 decide what to do with it.

7 I mean they have this elaborate
8 silvicultural guideline system, but they do
9 look at the fern, the competing vegetation,
10 the overstory trees, all of the understory
11 vegetation. And in the prescription process,
12 when they decide to treat the land, of course
13 they don't have control over the deer, but
14 they address all of those other factors first.
15 And then if you come to the bottom of the
16 tables to make your decision, after this long
17 process, there are some decisions raised that
18 lead you to, we'll fence (phonetic) for deer.

19 So I mean in the practice of
20 forestry on the landscape, all of these other
21 factors, the soil pH is routinely measured,
22 the fern coverage measured, Mountain Laurel.
23 All of these other things. And they may go
24 through a whole series of things that include
25 either chainsaw work or herbiciding, or

1 whatever, to get to conditions they think are
2 necessary for regeneration.

3 So although that's not in the
4 purview of the Game Commission, I mean that is
5 what's happening in the field. Those items
6 are addressed first and then as a last resort
7 if those things don't work then they are
8 looking at deer. But does that help?

9 CHAIRMAN STABACK: Yes, some.
10 Okay.

11 MR. RUBLE: Mr. Chairman, I might
12 suggest that a good candidate, or a good thing
13 to watch, would be if -- where enclosures are
14 put in place, and if those enclosures, if you
15 don't see a good response inside an enclosure,
16 that would be a pretty good indication that
17 something besides deer was going on in that
18 vicinity.

19 And I am not aware of instances in
20 Pennsylvania where there weren't good
21 vegetation responses to enclosures, but that
22 would be a key thing for you to keep an eye
23 on.

24 CHAIRMAN STABACK: Okay. The last
25 point we want to talk about and the third leg

1 of the stool and that is the citizens'
2 concerns, citizen committee, and I want to ask
3 you about your review of the CACs, the Citizen
4 Advisory Committees.

5 The report makes several criticisms
6 of the CAC process, centered on the makeup of
7 the councils in each of the management units.
8 The third leg on the stool has serious
9 problems, according to what I read on page 44
10 and page 45. Can you talk about what the
11 reports states about CACs, what you suggest
12 for the future, including the use of surveys?

13 MR. WILLIAMSON: I will. It is
14 probably no more important thing that an
15 agency does is to assess the desires of its
16 constituents. I think that's the underlying
17 premise behind the CAC process.

18 I kind of look at them as a focus
19 group. You have a select group of people
20 supposedly representing different issues and
21 different interest groups, you are allowed to
22 bring them up to speed with information and
23 data, and then you can go through a process
24 that they can tell you kind of as a -- as that
25 focus group which way they want to go.

1 We are not recommending you do --
2 that the Game Commission do away with the
3 CACs. We think they need to be modified.

4 And I think probably our most
5 important recommendation is to not totally
6 rely on the input you receive from CACs
7 without an independent backup, statistically
8 valid survey. You know, in political terms, a
9 poll that gets at least a second slice of that
10 pie so that you have, instead of one measure,
11 you have two measures that assess where the
12 citizens want the deer population to be
13 increased, decreased, or stabilized.

14 It's almost like a one size fits
15 all, in 22 WMUs. Every year, you are going to
16 have a CAC process and going -- It's probably
17 not necessary, use the tool where it fits and
18 use it wisely. And we're suggesting maybe try
19 it at the statewide level as well, but also
20 back it up with some robust, statistical
21 sampling of citizen desires as well.

22 So if there's, you know, kind of a
23 reaction I have seen to our report, where we
24 are saying, you know, we are going to throw
25 the baby out with the bath water on forest

1 regeneration, on deer health and on the CAC,
2 we are not. We are suggesting tweak it a
3 little bit. The core idea and philosophy
4 behind it is sound. Here's some suggestions
5 to tweak the way you collect the data, but,
6 you know, proceed with these measures.

7 CHAIRMAN STABACK: Correct me if I
8 am wrong, but in the report did you suggest
9 doing away with the manager, the Citizen
10 Advisory Committees within the management
11 units, the 22 that we have, and setting up a
12 CAC at the statewide level in place of that?

13 MR. WILLIAMSON: We suggested a
14 statewide CAC but not in replacement, totally.

15 I mean, as I mentioned before, I
16 think our idea is use the CACs within the
17 units where you think that will be a help. I
18 mean don't automatically do it because, you
19 know, for whatever reason, but use it where
20 you think it would provide you some assistance
21 that you are not going to get elsewhere.

22 Make sure you pay attention to
23 who's there. I think one of the issues that
24 we identified there was the makeup of these
25 committees.

1 CHAIRMAN STABACK: Um-hum.

2 MR. WILLIAMSON: So make sure you
3 do it right, use it when you think you need
4 it, back it up with a statewide CAC, and back
5 all of that up with a statistically valid
6 sample.

7 CHAIRMAN STABACK: One last
8 question on CACs. Are you aware of any
9 suggestions that ever came out of a CAC
10 meeting, anywhere, anywhere, that was adopted
11 by the commission?

12 MR. WILLIAMSON: In terms of
13 increase, decrease, or hold a herd the same, I
14 mean that decision?

15 CHAIRMAN STABACK: Of anything. It
16 could be health matters -- or forest health.
17 It could be the health of the deer herd. It
18 could be anything, anything that is outdoor
19 related. I mean do CACs report together,
20 citizen input, right, on perhaps deer
21 management, forest management and whatever?

22 Now, the meetings are held, I don't
23 know how often. Maybe monthly or maybe
24 quarterly, I am not sure how they work. And
25 of course the purpose of those meetings is to

1 advise, I would guess in some way, and make
2 suggestions to the Game Commission as to,
3 perhaps, how they could better manage a
4 specific portion of any given responsibility
5 that they have.

6 And I just wonder, and this thought
7 just came to me now, did the commission ever
8 adopt any, any kind of recommendations, in
9 fact, that ever came out of a citizen action
10 committee?

11 MR. WILLIAMSON: If I could read
12 from our report --

13 CHAIRMAN STABACK: But they are not
14 bound to do that, you know.

15 MR. WILLIAMSON: Correct.

16 CHAIRMAN STABACK: The commission
17 can sit and listen and accept all the input,
18 take it under advisement, and then either do
19 something with it or do nothing with it.

20 MR. WILLIAMSON: From our report,
21 of the 15 CAC meetings held as of July '09,
22 there were 10 who recommended populations to
23 increase; one to increase or stay the same;
24 two to remain the same; one to decrease; and
25 one CAC was not able to reach consensus. The

1 PGC deer team accepted recommendation from
2 seven of the 14 CACs that provided them.

3 The reason recommendations were not
4 accepted by the remaining four WMUs was that
5 the deer team determined forest health could
6 not accommodate an increased deer population.
7 So it sounds like, where 50 percent of the CAC
8 -- of the CAC recommendations did not run
9 counter to some other goal, the Game
10 Commission accepted.

11 CHAIRMAN STABACK: Um-hum. Okay.
12 Okay. Are there any other questions of -- No.

13 Okay. I am going to conclude my
14 questioning about the deer herd, the health of
15 the forests, the Citizen Advisory Committees,
16 by mentioning what has been brought up time
17 and time again in response to the deer audit
18 document.

19 For some who read the report, the
20 deer harvest reporting system is described as
21 critically flawed and miscalculated, embryo
22 studies are so bad that the whole approach
23 should be discarded, and CACs are one of the
24 problems that need to be reworked, and yet we
25 are told that the methods in use by the

1 commission are scientifically sound.

2 Can you see why there is some
3 confusion as to just how sound the science can
4 be when these other problems exist?

5 I hope you can understand what I am
6 trying to tell you, and the way the general
7 public, at least part of it, will perceive
8 this document.

9 Gentlemen, that concludes the
10 questions from me and from the committee. I
11 want to take a moment to thank each and every
12 one of you for traveling here, for being here,
13 and for the testimony that you have given. As
14 you can tell your management, it's certainly
15 an issue that brings out a lot of emotion and
16 interest. The questions today were all simply
17 to better understand the document. And that,
18 once again, thank you all for being here.

19 MR. WILLIAMSON: Thank you.

20 MR. HEALY: Thank you.

21 CHAIRMAN STABACK: Our next
22 presenter is the Executive Director of the
23 Pennsylvania Game Commission, Mr. Carl Roe.

24 MR. ROE: Thank you, Mr. Chairman.

25 I will be brief.

1 CHAIRMAN STABACK: You can begin
2 whenever you are ready. However, let me say
3 this. All we are going to do today, Carl, is
4 accept your testimony.

5 MR. ROE: Sure.

6 CHAIRMAN STABACK: Any questions
7 that any of the committee members may have, I
8 will ask if they put them in advance and we
9 will get together at another time down the
10 road and resolve them, if that's okay with
11 you?

12 MR. ROE: We certainly welcome the
13 opportunity to answer those questions, for
14 sure.

15 CHAIRMAN STABACK: As you would be,
16 and in fact I applaud that.

17 MR. ROE: And I may embellish a
18 little bit of my remarks here, okay.

19 Chairman Staback, Chairman Miller,
20 members of the House Game and Fisheries
21 Committee, we appreciate the opportunity to
22 appear before you today to provide remarks on
23 the deer management program of the
24 Pennsylvania Game Commission. My comments
25 will be very brief.

1 First, let me say it was a great
2 pleasure to work with the team from the
3 Wildlife Management Institute. We appreciated
4 the professional dialogue and exchange of
5 ideas. Although we did not always agree
6 during the discussions, it did provide food
7 for thought and offered constructive comments
8 to improve the program.

9 Needless to say, we are pleased
10 with the major conclusions of the report.
11 Specifically, the findings that the scientific
12 foundation of the deer management program is
13 sound; that wildlife management units
14 represent an appropriate compromise in their
15 size to achieve the necessary data; and that
16 our population model represents a
17 scientifically valid method of calculating
18 population trends.

19 We take note of the suggestions on
20 the use of Citizen Advisory Committees and the
21 desire to increase the sample size in forest
22 habitat area. We believe both of these
23 suggestions have merit. They may require
24 additional resources to accomplish them and we
25 will do the cost benefit analysis to see how

1 best to implement those recommendations.

2 Again, we thank the committee for
3 sponsoring this report. We believe it will
4 help the citizens of the Commonwealth have a
5 greater understanding and confidence in the
6 science we use to manage deer in Pennsylvania.
7 And I will be glad to answer any questions,
8 which obviously will be at a later date.

9 But just two points of
10 clarification on the harvest report aspect of
11 it. We all would love to have a higher rate
12 of harvest reporting to in fact increase the
13 confidence interval on those statistics. But
14 those are pretty good confidence intervals
15 right now, and they are validated by our game
16 take survey.

17 As we have reported on several
18 occasions, if you run the game take survey,
19 which we surveyed thousands of hunters across
20 Pennsylvania, and bounce that back against
21 that harvest report take, there is a direct
22 correlation between the harvest reporting
23 through the harvest report cards and our
24 automated system now and that game take
25 survey.

1 So we will be bringing that data
2 forward at the next meeting to be able to show
3 that to the rest of the members of the
4 committee, because there was a second check on
5 that harvest data that it really does validate
6 it.

7 The last thing I will say as far as
8 CACs, since that was the topic of discussion,
9 and the fact that the WMI noticed that it was
10 a bias, the bias was towards hunters. In
11 other words, the majority of the members, even
12 though they were farmers or foresters or other
13 representatives of other groups of concern in
14 the CACs, they were also hunters. So when you
15 took that, the bias was in fact towards
16 hunters, which would lend you to think bias
17 towards more deer as a result of the CAC
18 recommendations.

19 So we are in fact hiring a human
20 dimensions person, hopefully in the near
21 future, to bring some more data on the social
22 side of that, and not only rely on the CAC,
23 which is biased towards a hunter population as
24 opposed to the general population in
25 Pennsylvania.

1 So on those two issues, I will take
2 any questions you might have today. I don't
3 think I will. But we will certainly be more
4 than willing to answer questions in the
5 future.

6 CHAIRMAN STABACK: Carl, we have to
7 surrender the room by 11:00.

8 MR. ROE: Sure.

9 CHAIRMAN STABACK: That leaves us
10 about two minutes to go, so.

11 MR. ROE: Okay.

12 CHAIRMAN STABACK: We will put any
13 questioning, in advance, to a later date. And
14 we thank you, once again, for your willingness
15 to come here and offer testimony, and again
16 your willingness to respond to any line of
17 questioning that we may have had.

18 MR. ROE: Sure.

19 CHAIRMAN STABACK: We will get
20 around to that at a later date.

21 MR. ROE: We look forward to it.

22 CHAIRMAN STABACK: And with that
23 note, this hearing is adjourned.

24 (At 10:55 a.m., the hearing was
25 concluded.)