# The Woodpecker Method

By

### Axel Smith & Hans Tikkanen



# Contents

Key to Symbols used		4
Quick Start Guide		5
Woodpecker History		6
A Final Session		9
General Introduction		10
Summary of Tactical Motifs		21
Instructions		26
1	Easy Exercises	31
2	Intermediate Exercises	69
3	Advanced Exercises	197
4	Solutions to Easy Exercises	223
5	Solutions to Intermediate Exercises	247
6	Solutions to Advanced Exercises	345
Name Index		380
Sample Record Sheets		390

# Woodpecker History

### – by Hans Tikkanen

The name of the Woodpecker Method was not invented by me, but it was influenced by me and invented by my co-author, GM Axel Smith. It comes from a translation I've heard of my Finnish surname, Tikkanen, which is supposed to mean "little woodpecker". Together with the repetitive nature of the method, it seems fitting, although credit for many of the ideas behind the method lies elsewhere.

While developing and using the method, I did not remember where the basic ideas came from. When the method gained a slightly larger audience after I achieved three GM norms and could not resist questions about my training, I was made aware of the similarity to Michael de la Maza and his "Seven Circles" method from the book *Rapid Chess Improvement – A Study Plan for Adult Players*. I recognized the name and had indeed read it during my pre-professional time, when I spent several years reading whatever I could get my hands on about the interactions of the human consciousness, the brain and chess. This was done out of curiosity and also to figure out how it should influence my approach to chess playing and training. I think I forgot about that book due to its exclusive focus on adult players (basically adult beginners), and what I considered to be its overly-certain claims and statements with little or doubtful supporting evidence, and other flaws (a Jeremy Silman review offered an even more harshly worded opinion).

While my fascination for the relatively unknown subject matter of the human consciousness and brain remains (and indeed was a major motivation for ending my intermezzo as a chess professional and starting my studies in psychology), it seems to me to be beyond the scope of a chess tactics book, and highly speculative to boot. Regardless, one conclusion I drew from my reading was that a tremendous amount of activity happens unconsciously, below conscious effortful processing, and that this should reasonably be reflected in my approach to chess. I had previously (on a mostly unconscious level I'm sure!) been quite dismissive of these kinds of thoughts, and indeed my style at the chess board used to be effortful and concrete rather than intuitive. I would now say that I then unconsciously trusted my intuition to find the right moves to consider, but I only believed in the conscious verification process that seemed to me to be all there was. "Calculation, calculation, calculation!" was my motto. With my subsequent reading of psychological literature, I came to realize that there really is such a thing as intuition and I became much more aware of the unconscious parts of my approach.

### Putting it all together

Armed with my new insights, I endeavoured to find or develop training and thinking methods for my personal use. The most successful of them was the Woodpecker Method (although I didn't have a catchy name for it then), which I used extensively during the spring of 2010. My own experience with the method might be of interest to some, so here it comes.

First, I decided on the general rules of the method. I would solve a set of a thousand exercises (from various puzzle books) over whatever time period it took. Once I completed the set, I would take a break and then repeat the process again and again, getting faster each time. I checked my answers against the solutions given in the back of the book, and computer-checked in cases when I did not fully buy the solution provided by the author. (The frustration I feel when an exercise does not make sense has served as a great motivator to make the solutions in this book as accurate as possible!)

Being a chess professional, I had very few commitments distracting me from working hard on the solving. Of course, solving exercises in this manner is really hard work, so most days I did not manage a full eight-hour workday; but sometimes I did. Once I reached the end of the set of 1000, I took a well-deserved break, ranging from a full day to over a week. I did no other work on chess during these rest periods, except some playing.

With each cycle of solving, I aimed to halve the total solving time for the thousand exercises from that of the previous cycle. Eventually I was able to solve all of the puzzles within a single day – though not within eight hours. Initially I intended to repeat the whole process every six weeks. Later, however, I decided that "repeat one set of 1000 exercises before a serious tournament" was more realistic.

I hardly need state that the process was a demanding one, but I had a lot of motivation – partly from pent-up frustration due to having blundered away important games, but also because I was trying out of my own method. While it was tough on me, one of the books took even more of a beating – completely falling apart from the repeated solving!

### Results of the Training

As mentioned above, I trained with the Woodpecker Method in the spring of 2010. That summer, I achieved three GM norms and surpassed the 2500 barrier, all within a seven-week period. The positive effects did not stop there: the following year, my live rating briefly peaked at 2601.

Such quick results from any type of chess training are rare in my experience, but for me the Woodpecker Method seemed to be just what the doctor ordered! The increased tactical acuity and consistency that came from working so hard with the method significantly decreased my blunders and made me more confident at the board.

Would I have made the same improvement with some other type of training? It's not impossible – but my playing strength had not taken any significant leap in years, so I had been at a loss as to what to do differently to succeed. Although the Woodpecker Method probably wasn't the *only* way for me to raise my play, it certainly proved to be *a* way. The intersection of my interest in the human mind and my motivation to stop blundering surely helped me to devote more time and effort than I would have put into my usual training.

After my extraordinary success with the Woodpecker Method, I tried going a step further and sometimes managed to trust in my intuition without the perfectionistic need to always verify it. Maybe someday I will be able to play the sort of beautiful, intuitive chess that some great players are known for – that would really be something...

### Sharing the Method with Others

Around that time, there were several dedicated chess players in and around the southern part of Sweden, some of whom were working together, and all of us were naturally interested in each other's improvements and methods. While training with my own method during the spring, I had been quite tight-lipped about what I was doing; not to keep it to myself, but rather to be able to evaluate my experience of it so I could have a more informed opinion to share. After that, for me, glorious summer, I was obviously asked by many people about what I had done to finally take the step from IM to GM.

I described the method and my rationale for adopting it, and several others decided to give it a go. One Swedish trainer has apparently invited his students in the north of our country to work dedicatedly on the method for a while. It has also been mentioned in the Swedish Chess Advent Calendar. Most significantly, the method was given its name in *Pump Up Your Rating* by Axel, who incorporated it into his own training, which you can read about on the next page. From what I have heard, the results of players who trained using the Woodpecker Method have generally been positive, although I have yet to hear of anyone who put as much work into it as I did.

### A Final Session

### – by Axel Smith

Whereas Hans arranged his sessions to resemble normal working days, mine were more chaotic. Once I was hiking in the mountains the week before the Swedish Championship. Seeing the photos afterwards, I realized that I was staring at the exercise book in most of them. At least the surroundings looked nice in the photos.

Before I travelled to Hungary in December 2015 to chase my last GM norm, I solved the same broken book for the 11th and 12th times. I was determined to do something I had been dreaming of for years: completing a full set of exercises in less than 24 hours. I stayed in a basement room next to the block's laundry and once every full hour I walked around the room. Twice my wife came with freshly-baked bread – and a chance to quit. I was close to quitting when I had a breakdown somewhere towards the end, but the 978th and last exercise finally arrived after 22 hours and 18 minutes.

There are many possible ways to do the Woodpecker. All of them come down to the same thing: working on the exercises. However, it's easier to keep on solving if you have a plan. Hans forbade me from recommending the set-up above, for humanitarian reasons. And indeed, my first thought afterwards was "never again".

With that being said, the last session was not only tactically beneficial – it also made it easy to stay focused during the games in Hungary. You are not locking yourself in for day and night only to ruin everything by walking around when you are supposed to think.

Furthermore, for me, the many exercises are connected to the places where I have solved them: the underground in Berlin; a night train to Bucharest; the mountains where I hiked. So those 22 hours in the basement also contained a trip around Europe.



### General Introduction

### Tactics, Tactics!

Have you ever lost a chess game unnecessarily due to a tactical oversight? You are, to put it mildly, not alone. When we checked a randomized sample of games, we found that more than half of those with decisive results were decided by tactical mistakes. It's not straightforward to describe exactly what constitutes a tactical mistake, or if the game holds a specific decisive moment, but we used the following criteria to define a decisive tactical mistake:

- a) the position was not already lost or seriously worse
- b) the move blundered material or allowed a winning combination
- c) the opponent exploited the mistake to win the game

In preparation for writing this book, we decided to check the games with decisive results which were contested between grandmasters at the 2016 Swedish Championship. With only 19 such games, it's clearly not a big enough sample to draw major conclusions. Nevertheless, we were surprised to find that as many as 42% were decided by tactical mistakes. At lower levels, the frequency gets higher and higher, as the following table shows.

### Both players rated - Percentage of decisive games decided by tactical mistakes

GMs	42%
2200-2400	44%
2000-2200	63%
1800-2000	72%

The percentages in the three rating bands below GM level are based on 32 randomly chosen games in each category. This is by no means a comprehensive investigation and it doesn't give the whole picture; time management is also of crucial importance. Another relevant point is that it is harder to avoid tactical mistakes in defensible but passive positions, where the opponent has various attacking ideas and there are fewer decent moves. Nevertheless, it is safe to conclude that tactics have a high priority if you want to score points.

Assuming you have read Hans' *Woodpecker History* on page 6, you already have a rough idea of the kind of training you will be doing with this book. Over the next few pages, we will say a bit more about how we have organized the training material and how to get the most out of it.

### The Exercises

We have assembled a total of 1128 exercises, divided into three difficulty levels.

#### Easy (222 Exercises)

If these exercises are challenging enough for you, then it would seem logical to use the end of this section as your cut-off point, after which you will go back to the beginning for your second cycle. If, on the other hand, you find these puzzles rather easy, then start your set with them anyway! We have deliberately chosen these exercises because they feature simpler tactics than you will find in most puzzle books. A partial benefit of this approach is that it makes the book accessible to a wider audience. However, even if we were designing a Woodpecker program exclusively for players striving for the GM title, we would have started with these puzzles anyway, because they reflect reality. These simple tactics are the kind of things you need to see automatically during your games, rather than having to spend time and energy actively looking for them.

### Intermediate (762 Exercises)

To encourage speed, you will also find some relatively easy exercises in this section. There may also be some which you consider hard, but remember that the goal is not to score 100%, especially in early cycles. Even after working with all of the exercises, we each made quite a few errors when solving the draft. Another point worth keeping in mind is that many of the solutions were overlooked by a World Champion.

### Advanced (144 Exercises)

We would advise the majority of readers *not* to use this final section for Woodpecker training. Several of the positions are really tricky and more suitable for developing your ability to calculate, which veers slightly away from the main purpose of the Woodpecker Method. That said, we can see this section being useful in a couple of scenarios:

- 1) For the majority of readers, the Easy and Intermediate sections will contain more than enough material to carry out an intensive Woodpecker training plan. But once you have reached the end of it (and hopefully noticed a significant leap in your tactical ability over the board), you will, at some point, want to think about further training. The final section of more challenging exercises would suit this purpose.
- 2) For extremists who are already strong players, and who possess the time, energy and motivation to tackle this book in the most demanding way possible, this final section can be included in the main training plan. Try solving all 1128 exercises in cycles under the time constraints detailed in the *Instructions* section on page 26! To even consider taking on a challenge like this, you should probably be at a level where you are working towards the Grandmaster title.

### Speed

Tactical motifs usually appear effortlessly in our minds, but they don't travel alone; we also need to think methodically and work out the variations with some accuracy. So the Woodpecker

Method is not only developing pattern recognition but also calculation, focus, decision-making – and speed.

Once you know certain patterns and motifs, speed is key. The fastest thoughts are those that come to us automatically and while negative automatic thoughts can be a huge problem in psychopathology, automaticity has great benefits as well. The more automatic the search for motifs is, the greater is the chance that you will see enough. We take the view that a good way to develop automaticity is to solve a set of exercises repeatedly, gradually reducing the need for conscious searching. If this sounds somewhat similar to learning to ride a bike, that is because it is.

#### Other Points about the Exercises

We have long held the view that virtually all books on chess combinations are missing something central to real-game tactics: *red herrings*. When using conventional puzzle books, solving exercises sometimes becomes like watching a certain type of movie – you just know that everything will work out in the end. From a movie, it can detract tension and excitement, while in tactics training it can detract uncertainty and exactness.

We therefore decided it was important to include some red herrings, where the most obvious attempts backfire. By taking away the certainty that even seemingly easy tactical shots are fool-proof, we aim to bring the training experience one step closer to that of an actual game. While there could be an argument that this type of book is not necessarily the best forum for red herrings, we wanted to put our money where our mouths are.

When presenting the exercises, we have avoided giving away any prior information about the position's evaluation or the nature of the tactical motif waiting to be found. Other puzzle books may have their own reasons for including this information, but we want to keep the training as close as possible to a real game.

In some exercises, the task is to finish off a promising position which may be winning even without the tactic. In other cases, there are several winning moves. These are deliberate choices, to reflect different situations which occur during practical play. It's important to be as accurate as possible and to practise decision-making in all scenarios.

A common mistake is to stop too early in a variation, maybe only a single move before there's a crucial tactic. However, narrowing your search down to the critical lines is an important skill for a human player (even computers have to do it!) and trusting your intuition is the best way of doing this. Therefore, after a training session, it might be a good idea to think about *why* you failed certain exercises to see where your intuition misled you. But don't spend too much time dwelling on it – developing pattern recognition is best done on a mostly unconscious level. The good news is that training your tactical pattern recognition will increase the chance that the motif appears in your head while you visualize the position.

A final point about the exercises is that we have not only computer-checked the solutions, but also humanly checked them (thanks to our test solvers, Martin Jogstad and Tom Rydström). This brought to our attention some plausible attempts which the computer instantly dismisses, but which appear tempting to a human. This enabled us to improve the solutions by mentioning some of those variations that *almost* work.

## Chapter 2

### Intermediate Exercises



Chess is everything: art, science and sport. - Anatoly Karpov

1

b

c

f

h

g

b

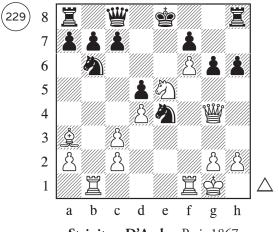
d e

h

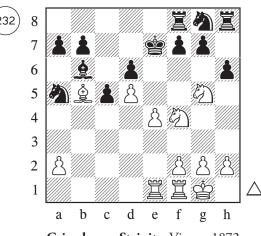
d

Bird – Steinitz, London (6) 1866 Hamppe – Steinitz, Vienna 1859 8 8 7 7 6 6 5 5 夏 4 4 2 3 3 2 2 2 2 1 1 d f f b d h a c e g c e **Steinitz – Strauss**, Vienna 1860 Steinitz – Bird, London (9) 1866 8 8 7 7 6 6 5 5 4 4 3 3 2 2 2 2 1 1 b f h b d f a c e g a c g Steinitz – Anderssen, London 1862 Steinitz – Czarnowski, Paris 1867 8 225 8 7 7 6 6 5 5 4 4 3 3 2 2

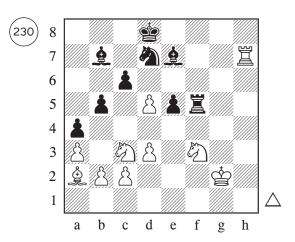
Steinitz – Winawer, Paris 1867



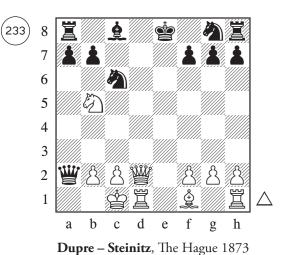




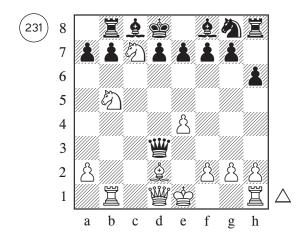
Steinitz – D'Andre, Paris 1867

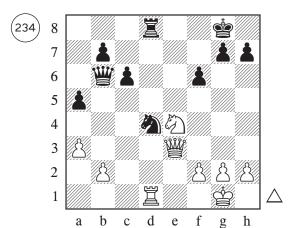


Grimshaw – Steinitz, Vienna 1872



Steinitz – Walsh, London (simul) 1870





### Chapter 5

# Solutions to Intermediate Exercises



There are some aspects of work you need to keep working on and no matter what environment you are in. Continuous learning is very important. It's what I call 'competitive tension', which is about having a competition around. – Viswanathan Anand

### Wilhelm Steinitz

Only the player with the initiative has the right to attack.

### **223.** Carl Hamppe – Wilhelm Steinitz, Vienna 1859

21... ≜xd4†! 22. Åh1 22.cxd4 ∰xh2 mate ✓; Or 22. 爲f2 ∰xh2†—+ when the crucial h2-pawn can be taken as both white pieces are pinned. 22... 爲xg3—+ ✓ Black won a piece and soon the game.

### 224. Wilhelm Steinitz – Strauss, Vienna 1860

23. □ xe6†! 中xe6 23...fxe6 24. □ h6†+- ✓ wins the queen. 24. □ e4† ✓ 中d7 White's position is winning and you don't have to see any further. Steinitz played: 25. □ xb7† 中e6 26. □ e1† 中f5 27. □ xf7† 27. □ e4 mate! 27... □ g4 28. □ f3† □ h4 29. □ h3 mate

#### **225. Wilhelm Steinitz – Adolf Anderssen**, London 1862

33...e3! Black had a dominant position and an extra pawn, so he could win slowly in many ways, but this is the quickest winner. 34.f3 Or 34.fxe3 \( \begin{align\*} \begin{

### **226.** Henry Bird – Wilhelm Steinitz, London (6) 1866

**13... □ de8†!** 13... **□ he8†!** comes to the same thing. **14. ②xe8 □ xe8† 15. □ f2 □ e3†** Or 15... **②**c5† 16. □ g3 □ h6! with a winning attack against the stranded king on g3. **16.** □ **f1** □ **xf3** □ **17.gxf3** □ **c5!** ✓ **0–1** The only move, with forced mate in two moves.

### **227. Wilhelm Steinitz – Henry Bird**, London (9) 1866

9.h3! \( \mathbb{\text{"kg2}} \) 9...\( \mathbb{\text{"h5}} \) 10.g4+- \( \sqrt{\text{ also traps the queen.}} \) 10.\( \mathbb{\text{h2+-}} \( \sqrt{\text{ Bird resigned after:}} \) 11.\( \mathbb{\text{kh2}} \) \( \mathbb{\text{kh4}} \) 12.\( \mathbb{\text{kh5}} \) 1-0

### 228. Wilhelm Steinitz – Hieronim Czarnowski, Paris 1867

**21.**②**c6†!** ∰**xc6** 21...②xc6 22.③xc5† ✓ \$\text{de}\$e8 23.③xc6† ∰xc6 24.∰xd8 mate. **22.**②xc6 ②xe3 22...☐xd2 23.③xc5†+- ✓ comes with check and wins a rook. **23.**∰**b4† 1–0** Other moves were also winning.

### **229. Wilhelm Steinitz – Szymon Winawer**, Paris 1867

White has a winning position, but can push his advantage with 17. \(\mathbb{\mathbb{H}}\)\(xg6!+\) since Black cannot take back due to: 17...f\(xg6\)\(18.f7\)\(\mathbb{\mathbb{H}}\)\(d8\)\(19.f8\)\(\mathbb{\mathbb{H}}\)\(\mathbb{H}\)\(20.\)\(\mathbb{H}\)\(xf8\)\(mathbb{mate}\)✓

### **230. Wilhelm Steinitz – Emile D'Andre**, Paris 1867

27.d6! White wins a piece after: 27... \(\dag{\text{\$\pi}}\)xd6 28.\(\dag{\text{\$\phi}}\)e6+- ✓

### **231. Wilhelm Steinitz – Walsh**, London (simul) 1870

**14.**②**e6†!** The knight cannot be taken due to the discovered attack. **14...**⊈**e8** 14...fxe6 15.\(\hat{2}\)a5†+- \(\sigma\) and 14...dxe6 15.\(\hat{2}\)a5† \(\sigma\) wins the queen and the game. **15.**\(\hat{2}\)bc7 mate \(\sigma\)

### 232. Wilhelm Steinitz – Henry Bird, London 1870

White is a pawn down, so has to create something. 19.②ge6! fxe6 It would have been better for Black to give up the exchange on f8 with 19...g6±. With a pawn and opposite-coloured bishops for the exchange, Black has some compensation. Note that the bishop on b5 is essential after 19...g5 20.②xf8 gxf4 21.②d7!. ✓ Now, 21...②d8 22.e5! is the only winning move, but that's not necessary to see before sacrificing the knight. The point is 22...a6 23.exd6† \$\ddots\$xd6 24.②e5!+-threatening a fork on f7. 20.②g6† \$\ddots\$f7 The knight would not escape from h8 after 20...\$\ddots\$f6, but White has 21.②xf8+- ✓. 21.③xh8† \$\ddots\$f6 The knight looks trapped, but it has two ways to escape. 22.f4 22.\ddots 3 is also good: 22...g5 23.\ddots f3† \$\ddots g7 24.\ddots xf8 \ddots xf8 25.dxe6± with a safe square on f7. 22...②e7 23.e5†!+- ✓ \$\ddots f5 24.\ddots d3†! 1-0 Not only can the white knight escape, the black king is mated!

#### 233. Walter Grimshaw – Wilhelm Steinitz, Vienna 1872

**14.**②**c**7†! **含f8** 14...含e7 15.營d6 mate ✓ **15.營d6†!** Forcing Black to set up a bank-rank mate. **15...**②**ge7** 16.營d8†! Not 16.②xa8? 營a1† with some compensation for the exchange. **16...**②xd8 **17.**墨xd8 mate ✓

### **234. C.E.A. Dupre – Wilhelm Steinitz**, The Hague 1873

**28.** ②d6! c5 28... □xd6 29. □e8 ✓ mate is easy, but 28... □xb2 ✓ is tricky. White's best is to defend against the back-rank mate and take on d4 with the rook on the next move. Instead 29. □xd4?! □xd4 30. □xd4 is probably winning, but not easily. **29.** □xd4! ✓ 1–0 The check on e6 is decisive.